

**AVerMedia®**  
**AVerDiGi**  
*Wireless/Wired IP Camera*

**SF1301W**  
**SF1301**

**User Manual**



# CONTENTS

<b>CHAPTER 1 INTRODUCTION.....</b>	<b>1</b>
<b>1.1 Features and Benefits.....</b>	<b>1</b>
<b>1.2 Package Contents .....</b>	<b>2</b>
<b>1.1.1 SF1301W (Wireless).....</b>	<b>2</b>
<b>1.1.2 SF1301 (Wired).....</b>	<b>2</b>
<b>1.3 System Requirements.....</b>	<b>3</b>
<b>1.4 Default Settings .....</b>	<b>3</b>
<b>1.5 LED Indicators .....</b>	<b>4</b>
<b>1.6 Rear Panel.....</b>	<b>4</b>
<b>1.6.1 SF1301W .....</b>	<b>4</b>
<b>1.6.2 SF1301 .....</b>	<b>5</b>
<b>1.6.3 Using the WPS Button (Only SF1301W) .....</b>	<b>6</b>
<b>CHAPTER 2 INSTALLING THE CAMERA.....</b>	<b>7</b>
<b>2.1 Attach Camera to the Stand .....</b>	<b>7</b>
<b>2.2 Connect Ethernet Cable.....</b>	<b>7</b>
<b>2.3 Connect Power and Power On Camera.....</b>	<b>8</b>
<b>2.4 Reset Camera .....</b>	<b>8</b>
<b>CHAPTER 3 USING THE CAMERA WEB MANAGER.....</b>	<b>9</b>
<b>3.1 First Time to Use the IP Camera .....</b>	<b>9</b>
<b>3.2 Familiarizing the Function Buttons in Live Video Viewer.....</b>	<b>16</b>
<b>3.3 IP Camera Setup.....</b>	<b>18</b>
<b>3.3.1 Setup Wizard .....</b>	<b>18</b>
<b>3.3.2 Network Settings.....</b>	<b>22</b>
<b>3.3.3 Wireless Setup.....</b>	<b>25</b>
<b>3.3.4 Image Setup.....</b>	<b>26</b>
<b>3.3.5 Video and Audio Settings.....</b>	<b>27</b>
<b>3.3.6 Motion Detection .....</b>	<b>30</b>
<b>3.3.7 Time and Date .....</b>	<b>31</b>
<b>3.3.8 Recording Setup .....</b>	<b>32</b>
<b>3.3.9 Snapshot Setup .....</b>	<b>34</b>
<b>3.4 System Configuration .....</b>	<b>36</b>
<b>3.4.1 Device Management.....</b>	<b>37</b>
<b>3.4.2 Backup and Restore Setup .....</b>	<b>38</b>
<b>3.4.3 Firmware Upgrade .....</b>	<b>39</b>
<b>3.4.4 Device Information .....</b>	<b>40</b>
<b>3.4.5 Camera Log .....</b>	<b>40</b>
<b>CHAPTER 4 IPCAMCENTER.....</b>	<b>41</b>
<b>4.1 Install the IPCamCenter .....</b>	<b>41</b>
<b>4.2 Using the IPCamCenter .....</b>	<b>43</b>

4.2.1	To Connect the Camera.....	43
4.2.2	Familiarizing the Buttons in the IPCamCenter .....	45
<b>4.3</b>	<b>System Configuration .....</b>	<b>47</b>
4.3.1	Camera Management .....	48
4.3.2	Camera Setting .....	49
4.3.3	Recording Option.....	56
4.3.4	Other Options.....	56
<b>4.4</b>	<b>Playback the Recorded File.....</b>	<b>58</b>
	<b>APPENDIX A TECHNICAL SPECIFICATIONS .....</b>	<b>59</b>

## FCC NOTICE (Class B)



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## Federal Communications Commission Statement

**NOTE** - This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

## European Community Compliance Statement (Class B)



This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive 2004/108/EC.

## DISCLAIMER

No warranty or representation, either expressed or implied, is made with respect to the contents of this documentation, its quality, performance, merchantability, or fitness for a particular purpose. Information presented in this documentation has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies. The information contained in this documentation is subject to change without notice.

In no event will AVerMedia be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use this product or documentation, even if advised of the possibility of such damages.

## TRADEMARKS

"AVerMedia" is a trademark (or registered trademark) of AVerMedia Technologies, Inc and has been authorized AVerMedia Information Inc to use. Other trademarks used herein for description purpose only belong to each of their companies.

## COPYRIGHT

©2009 by AVerMedia Information, Inc. All right reserved.

No part of this document may be reproduced or transmitted in any form, or by any means without the prior written permission of AVerMedia Information Inc. AVerMedia Information Inc. reserves the right to modify its models, including their characteristics, specifications, accessories and any other information stated herein without notice. The official printout of any information shall prevail should there be any discrepancy between the information contained herein and the information contained in that printout.

**WARNING**

TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

**CAUTION**

IF THERE IS ANY DAMAGE, SHORTAGE OR INAPPROPRIATE ITEM IN THE PACKAGE, PLEASE CONTACT WITH YOUR LOCAL DEALER. WARRANTY VOID FOR ANY UNAUTHORIZED PRODUCT MODIFICATION

**NOTICE**

- INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.
- THE INFORMATION CONTAINED HEREIN IS TO BE CONSIDERED FOR REFERENCE ONLY.

## About This User Manual

This user manual provides instructions on how to install the IP camera and use it for camera monitoring applications. Camera monitor applications are accessible through an Ethernet or 802.11g wireless local network.

## Before You Start

Please read and make sure you understand all the prerequisites for proper installation of your new IP camera. Have all the necessary information and equipment on hand before beginning the installation.



# Chapter 1 Introduction

The SF1301 and SF1301W IP Camera transmit live real-time high-quality MPEG-4 video through an Ethernet network or 802.11g wireless LAN useful for remote monitoring applications. The live video can be viewed remotely and managed through the network from any computer connected to the network. A built-in microphone allows synchronized audio and high-quality video monitoring.

## 1.1 Features and Benefits

**Easy to use** - The camera supports DirectX 9.0; therefore, the only requirement you need is the web browser software such as Internet Explorer 6.0 or above. Once you have a valid IP Address, just connect it and you can view the picture and receive sound from your camera. In addition, the camera's stand allows you to adjust the camera for optimal viewing angle.

**Support variety of platforms** - The camera supports TCP/IP networking, SMTP e-mail, HTTP and other Internet related protocols. It can be utilized in a mixed operating system environment, including Windows 9 2000/XP/Vista. Moreover, it can be integrated easily into other www/ Intranet applications.

**Web configuration** - Applying a standard web browser, the administrator can configure and manage the camera directly from its own web page via the Intranet or Internet. Up to 20 user accounts are permitted with privilege setting controlled by the administrator.

**Remote Utility** - The powerful IPCamWizard application assigns the administrator with a pre-defined user ID and password, allowing the administrator to modify the camera settings from the remote site via Intranet or Internet. When new firmware is available, you can also upgrade remotely over the network for added convenience. Users are also allowed to monitor the image, and take snapshots.

**Broad Range of Applications** - With today's high-speed Internet services, the camera can provide the ideal solution for live video images over the Intranet or Internet for remote monitoring. The camera allows remote access from a web browser for live image viewing, and allows the administrator to manage and control the camera anywhere and anytime in the world. Apply the camera to monitor various objects and places such as homes, offices, banks, hospitals, child-care centers, amusement parks and other varieties of industrial and public monitoring. The camera can also be used for intruder detection; in addition, it can capture still images for archiving and many more applications.

## 1.2 Package Contents

### 1.1.1 SF1301W (Wireless)



SF1301W



Power Adapter



RJ-45 Ethernet Cable



Antenna



Camera Stand



Installation CD-ROM

### 1.1.2 SF1301 (Wired)



SF1301



Power Adapter



RJ-45 Ethernet Cable



Camera Stand



Installation CD-ROM



If there is any damage, shortage or inappropriate item in the package contents, please contact with local dealer



**WARNING**

**WARRANTY VOID FOR ANY UNAUTHORIZED PRODUCT MODIFICATION**

## 1.3 System Requirements

### ■ Computer

CPU	Intel Celeron 1.1 GHz or above
OS	Microsoft® Windows 2000/XP/Vista
Memory	128 MB or above
VGA Resolution	800 x 600 or above
Ethernet	10BASE-T Ethernet or 100BASE-TX Fast Ethernet
Media	CD-ROM Drive

### ■ Network

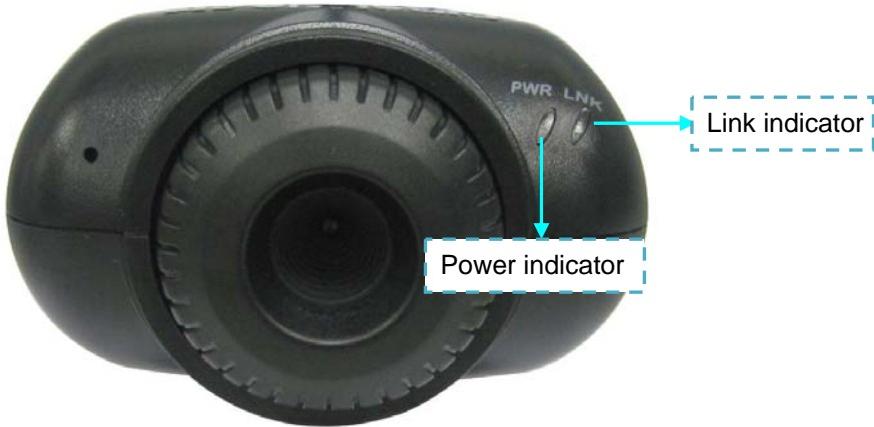
- ✓ Local Area Network: 10Base-T Ethernet or 100Base-TX Fast Ethernet
- ✓ Wireless Local Area Network (wireless model): IEEE 802.11g Wireless LAN

## 1.4 Default Settings

Use the default settings to access the web-based management software and live video display.

Default configuration settings	
Username	The Username will be prompted to enter when access the IP camera configuration screens using a Web browser. The default Username is <b>admin</b> .
Password	The Password will be prompted to enter when access the IP camera configuration screens using a Web browser. The default Password is blank.
IP address	The camera default IP address using the DHCP. Using the <b>IPCamWizard</b> to search the camera for the first time using.
Subnet Mask	The subnet mask will depend on the IP address of camera has been assigned by DHCP on your network.

## 1.5 LED Indicators



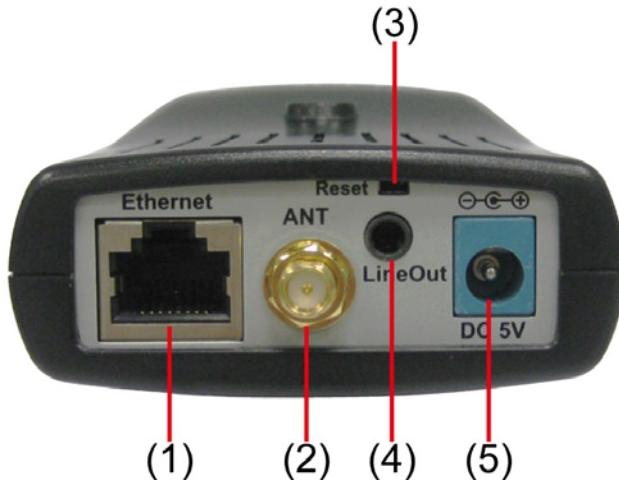
The **PWR** and **LNK** LED indicators provide the several statuses as the below table listing:

<b>PWR</b>	<b>POWER</b>	■ <b>Lighting in Blue:</b> IP camera is power on. ■ <b>Light Off:</b> IP camera is power off.
	<b>WPS</b>	■ <b>Success:</b> Lighting and then reboot automatically. ■ <b>Fail:</b> Blinking about 10 sec, and then reboot automatically.
<b>LNK</b>	<b>Link</b>	■ <b>Lighting in Orange:</b> Ethernet link is valid. ■ <b>Blinking:</b> Data is transmitted or received through the Ethernet link.

## 1.6 Rear Panel

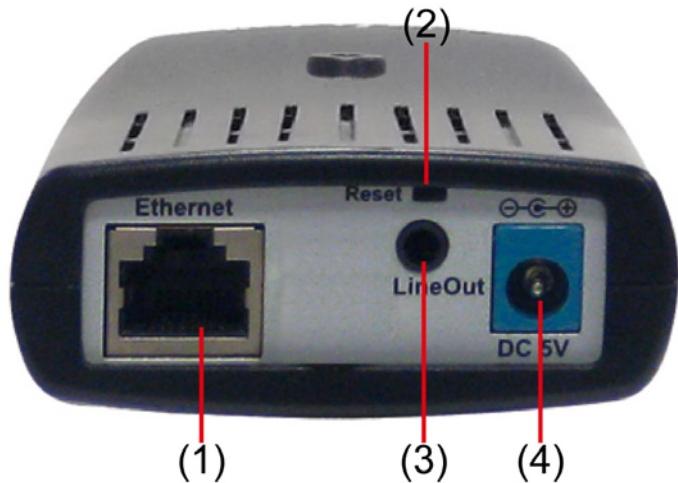
### 1.6.1 SF1301W

Connect the power adapter cord and network cables on the rear panel. The reset button is also located on the back of the device.



Name	Function
(1) Ethernet port	For connecting to Ethernet LAN. The port is auto MDI-II/MDI-X and auto-negotiation for port speed.
(2) Antenna	For attaching the antenna that included in package.
(3) Reset button	Press to restore to the factory default setting.
(4) Audio line out	For connecting the audio out device such as speaker.
(5) DC power	For connecting the power adaptor.

## 1.6.2 SF1301



Name	Function
(1) Ethernet port	For connecting to Ethernet LAN. The port is auto MDI-II/MDI-X and auto-negotiation for port speed.
(2) Reset button	Press to restore to the factory default setting.
(3) Audio line out	For connecting the audio out device such as speaker.
(4) DC power	For connecting the power adaptor.

### 1.6.3 Using the WPS Button (Only SF1301W)

Wi-Fi Protected Setup (WPS) is a standard for easy and secure establishment of a wireless home network.

The wireless camera and AP (Access Point) device must both support WPS.

Please refer the following steps to enable WPS function:



1. Please make sure your Access Point (AP) device supports WPS function.
2. Pressing the WPS button of AP.
3. Press and hold the WPS button of IP camera until the power LED turns off (about 5 seconds), and then, the LED will start to blink at every 2 seconds that means WPS function is set.
4. And then, wait about 120 seconds for WPS to be functional between AP and the IP camera.
5. According the power indicator can indicates the following status:
  - **Enable WPS Successful:** power LED is lighting and IP camera will reboot automatically.
  - **Enable WPS Fail:** power LED is blinking every 10 seconds until 120 seconds later, and then IP camera will reboot automatically.
6. If WPS setup is failed, please re-do the above steps 2 to 4.

# Chapter 2 Installing the Camera

The camera is intended for indoor use. Therefore, the power adapter and power source should be protected from water and moisture, excessive heat, direct sunlight and cold. Please make sure the power adapter and cord and Ethernet cable are safely arranged so they do not create a tripping hazard and will not be disturbed by people or objects moving past.

The camera can be attached to the stand that is included in the package. The camera stand can be mounted on a flat surface through the three screw holes on the base of the stand.

Please refer the following description to install the camera.

## 2.1 Attach Camera to the Stand

The IP camera comes with a camera stand, which has a swivel prop stand that can be attached to the camera's screw hole on the top/bottom.

1. Screw tight the swivel prop stand and screw the black nut on the swivel prop stand.
2. And then, attach the camera on the stand.
3. Lose the wheel can adjust the camera to the wanted position. Remember to tight the swivel prop stand after adjusting.
4. To mount the camera, using the screws to secure the camera stand on the wall.



## 2.2 Connect Ethernet Cable

Plug-in the Ethernet cable into the Ethernet port that is located on the rear panel of the camera. Both wired and wireless IP camera can be installed Ethernet cable.



SF1301



SF1301W

## 2.3 Connect Power and Power On Camera

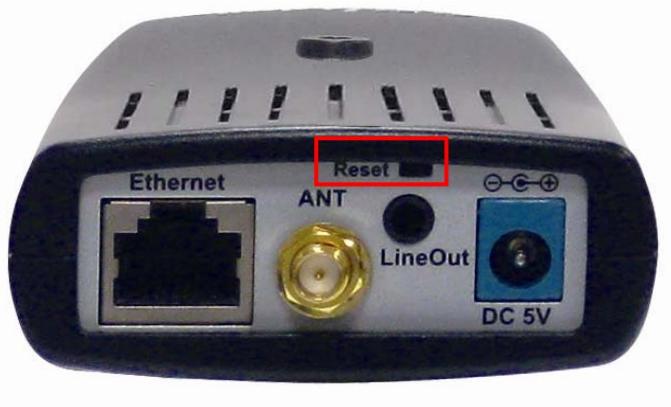
Connect the external power adapter to the DC power input connector located on the camera's rear panel, and then connect it to your wall outlet. You can confirm the power source is supplied from the Power LED on the camera.



## 2.4 Reset Camera

To reset the system settings to factory defaults, please follow below steps:

1. Make sure the power status of camera is **ON**.
2. Press the reset button about 6 seconds.
3. And then, release the reset button.
4. The camera will automatically reboot. Upon restarting the camera loads the factory default configuration settings.



# Chapter 3 Using the Camera Web Manager

The IP camera can be managed by using the web browser through the internet. It is recommended to check and make sure the accessing of the IP camera before installing it at the location, especially if it is mounted to a ceiling or other area that is difficult to physically access.

## 3.1 First Time to Use the IP Camera

For the first time, using the IPCamWizard to initialize the IP camera. Follow the below steps to initial the IP camera:

1. Place the installation CD into the CD-ROM drive then click **IPCamWizard** to install it.



2. To run the **IPCamWizard**, click **Start > Program > NetworkSurveillance > IPCamWizard**.



Please make sure the IP camera is installed on your network.

3. Click ➤ to go to next step. To exit, click ⏎.



4. The detected IP cameras will be listed out. Select the camera that user wants to configure and click  go to next step. To refresh the camera list, click  . To link to the Live Video Viewer, click .



**SELECT YOUR CAMERA**

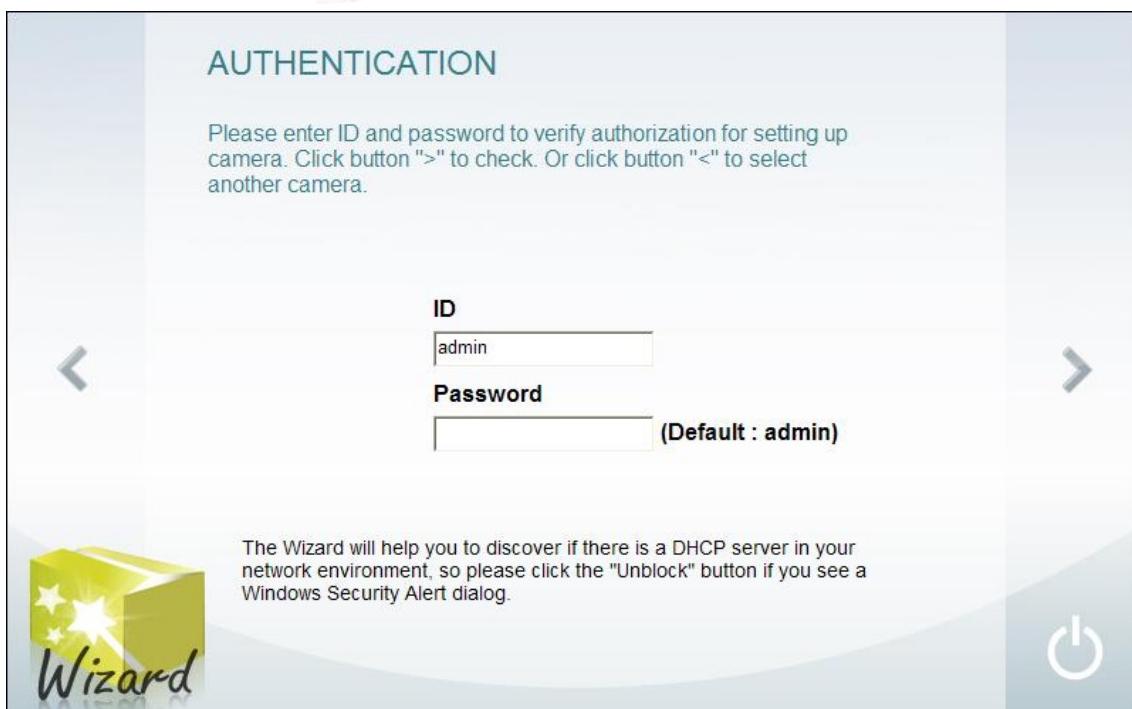
Please select a camera in the camera list then click ">" or try link it with web browser. If you can't find specified camera, please check your camera's wire link then click "Re-scan" again.

Name	IP Address	Model	MAC
SF1301	10.1.2.44	SF1301	001D6A4C62BA



5. Enter the **ID**(default is **admin**) and **Password**(default is blank) of the camera for authentication verify. Click  to go to next step and click  to go back previous page.



**AUTHENTICATION**

Please enter ID and password to verify authorization for setting up camera. Click button ">" to check. Or click button "<" to select another camera.

**ID**

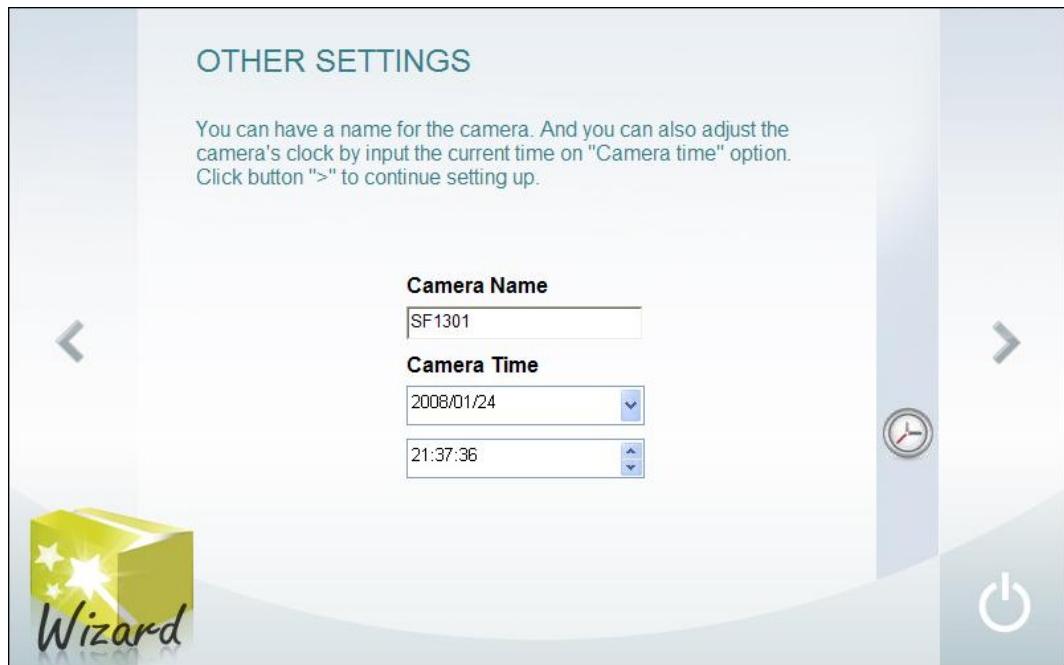
**Password**  
 (Default : admin)

The Wizard will help you to discover if there is a DHCP server in your network environment, so please click the "Unblock" button if you see a Windows Security Alert dialog.

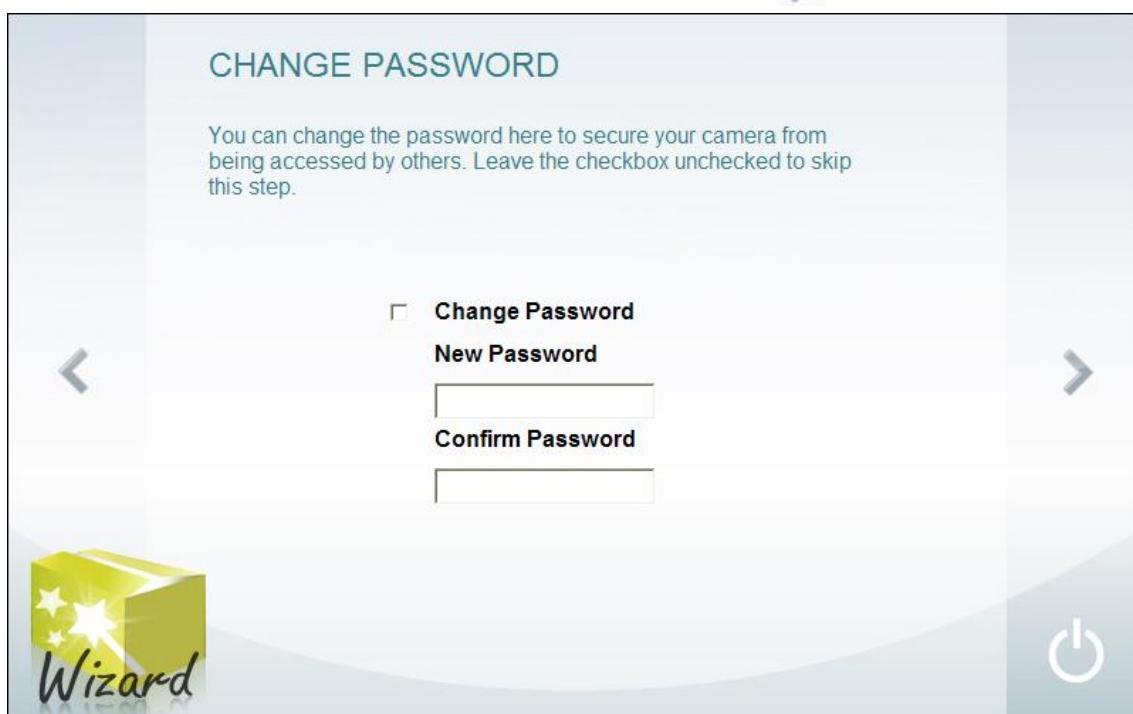


6. Assign a **Camera Name** to the camera. Select the correct **Date** and **Time** of the camera. User also can click  to copy your PC's system time to the camera. And then, click  to go to next step.

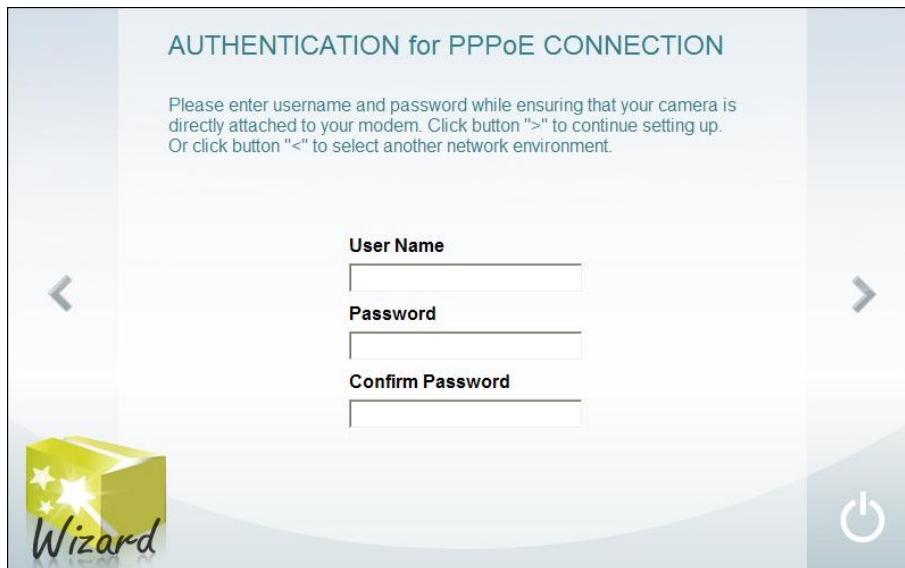


7. To change the authentication password. Mark **Change Password**, and enter the **New Password** and re-enter the password in **Confirm Password** column to confirm. Click  to go to next step.



8. Select the type of network connection – **PPPoE, DHCP, Fixed IP**.

- **PPPoE:** For PPPoE client Internet access. Fill in the **User Name, Password, and Confirm password** for accessing authentication. Click  to go to next step.



AUTHENTICATION for PPPoE CONNECTION

Please enter username and password while ensuring that your camera is directly attached to your modem. Click button ">" to continue setting up. Or click button "<" to select another network environment.

User Name

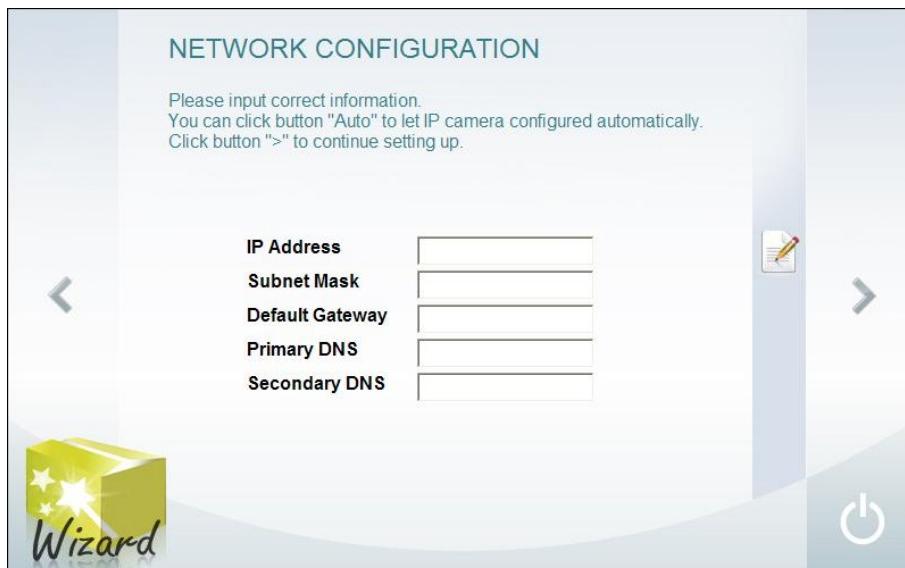
Password

Confirm Password

Wizard

< >

- **DHCP Connection:** Assign the IP address by local DHCP server to the camera.
- **Static IP Address:** Assigns a constant IP address to the camera. Click  to fill in the **IP Address, Subnet Mask, Default Gateway, Primary DNS, and Secondary DNS** automatically. Click  to go to next step.



NETWORK CONFIGURATION

Please input correct information.  
You can click button "Auto" to let IP camera configured automatically.  
Click button ">" to continue setting up.

IP Address

Subnet Mask

Default Gateway

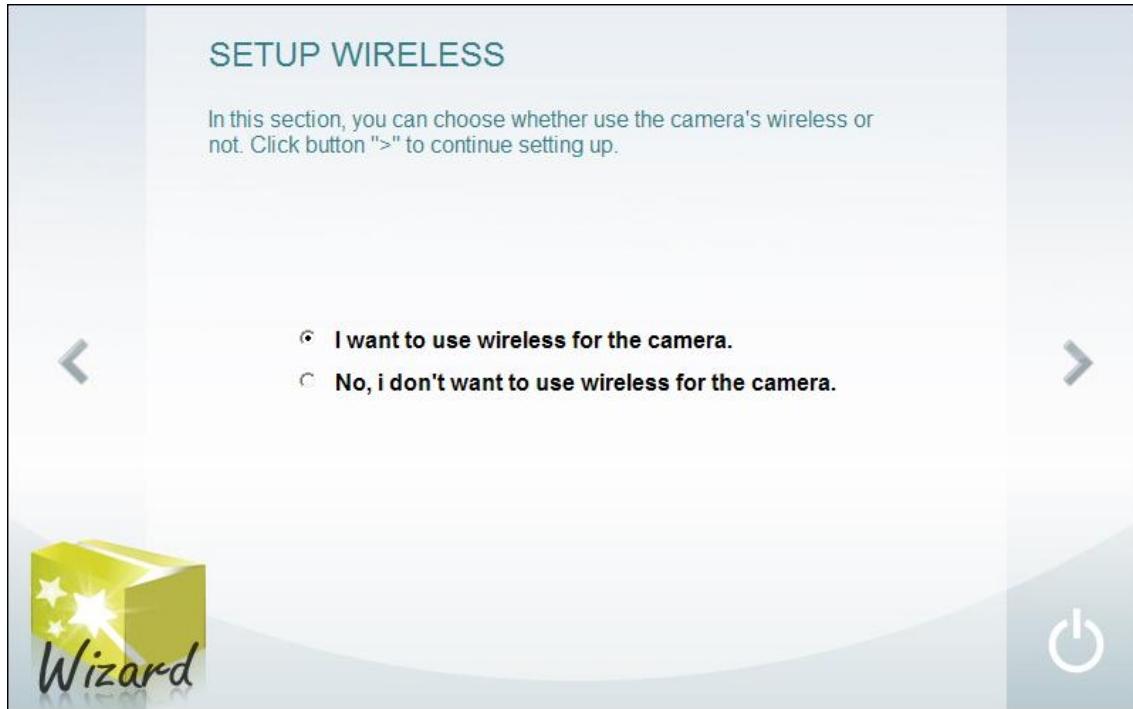
Primary DNS

Secondary DNS

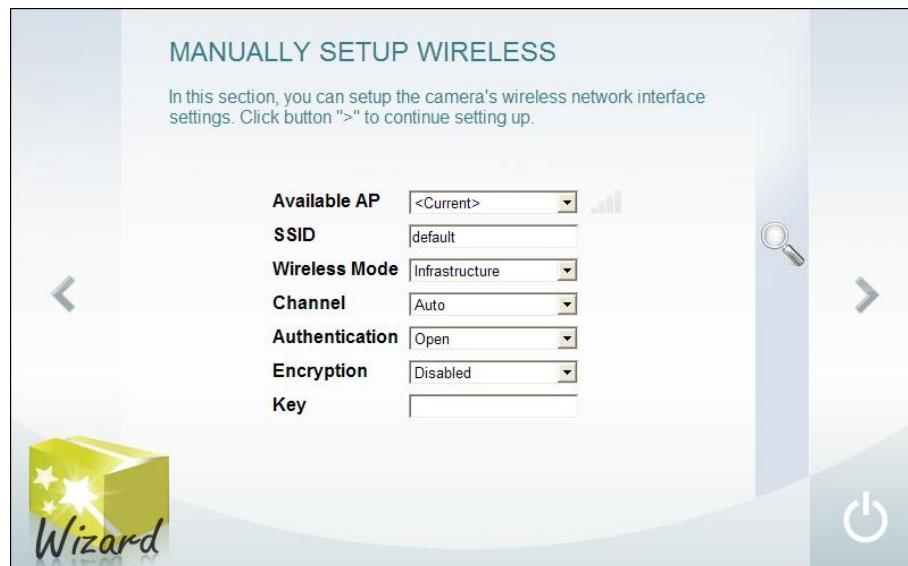
Wizard

< >

9. If your camera is a wireless camera, select the **I want to use wireless for the camera**. Otherwise, select the other option.



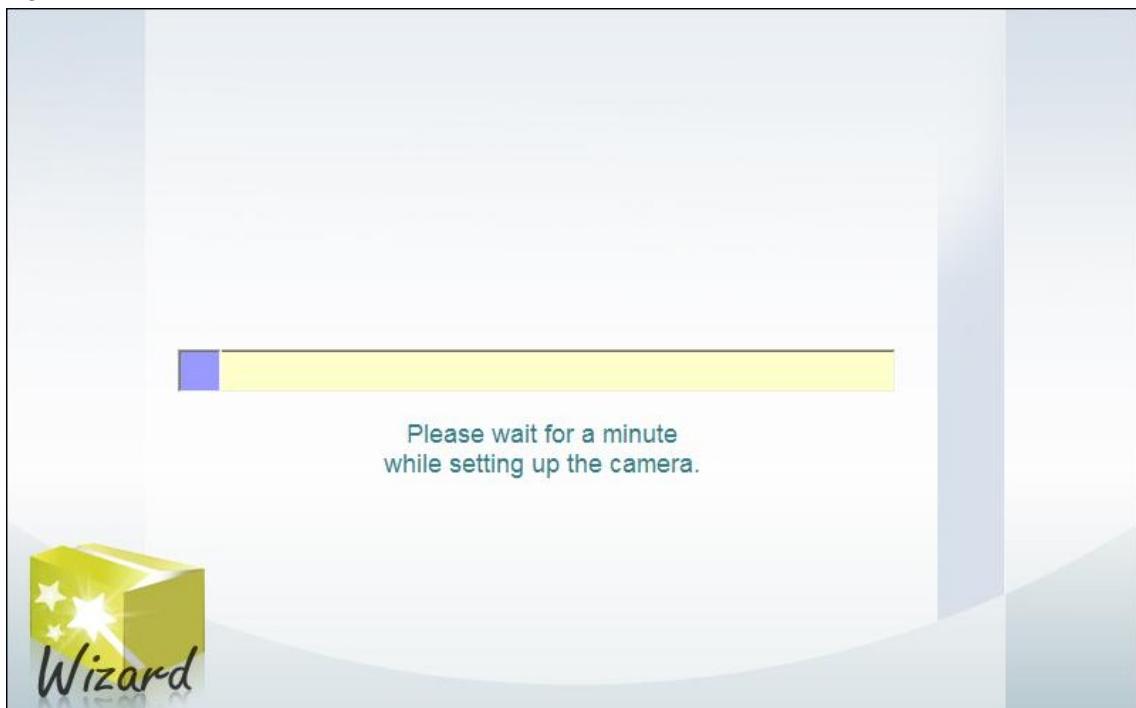
- For wireless, select the **AP** that has been detected on the network. Click can re-scan the AP. Enter the **SSID** that is the name assign on AP. And then, select the related parameters in the following fields that are including **Wireless Mode**, **Channel**, **Authentication**, **Encryption** and **Key**. The Authentication, Encryption and Security Key depend on the type of security that you have used. Click to go to next step.



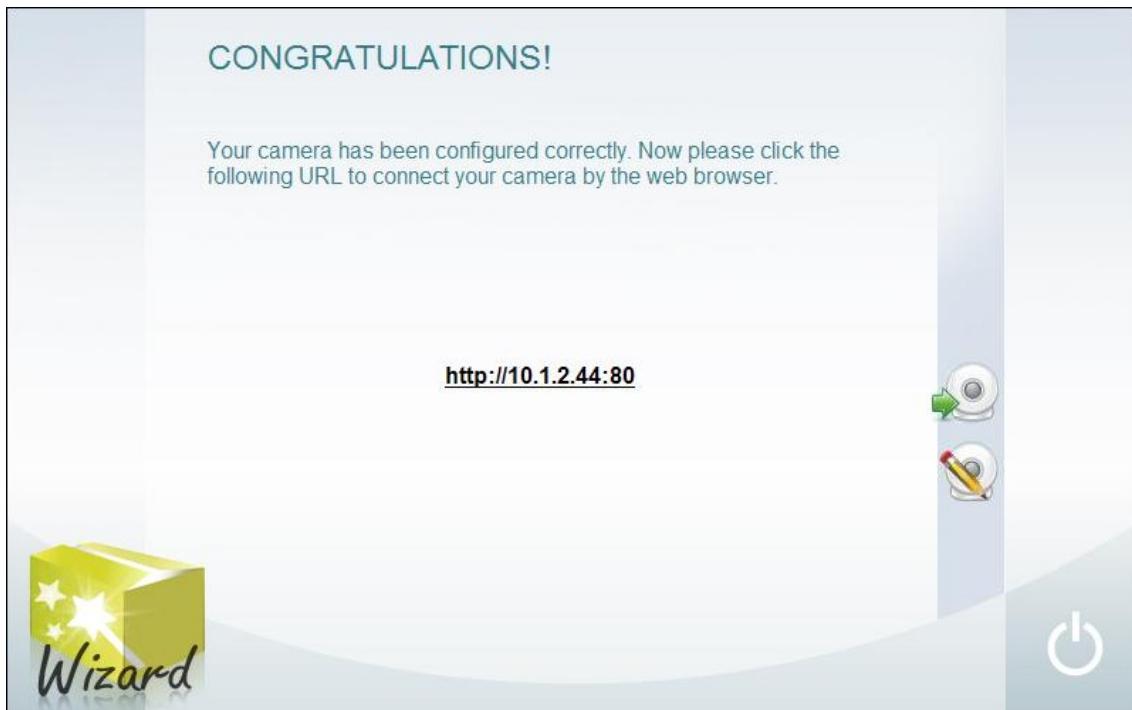
- For wired, view the information of the camera setting. Click  to go to next step.



10. The configuration will be saved into the camera.



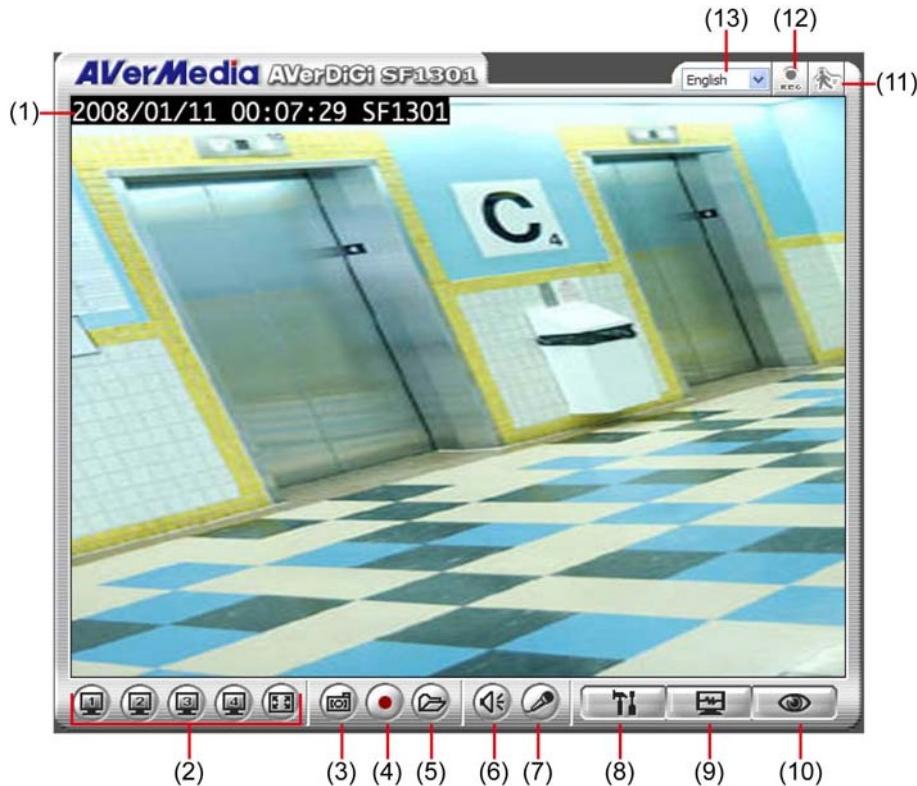
11. The setting is completed. User can click  link to the Live Video Viewer. To setup another camera, click .



## 3.2 Familiarizing the Function Buttons in Live Video Viewer

On the IPCamWizard interface, select the IP camera that has been found on the network and click  to connect with IP camera. When authentication dialog show up, enter the **ID**(default is **admin**) and **Password**(default is no password) to login the camera.

After connection has been made, the live video viewer will appear as following illustration shown.

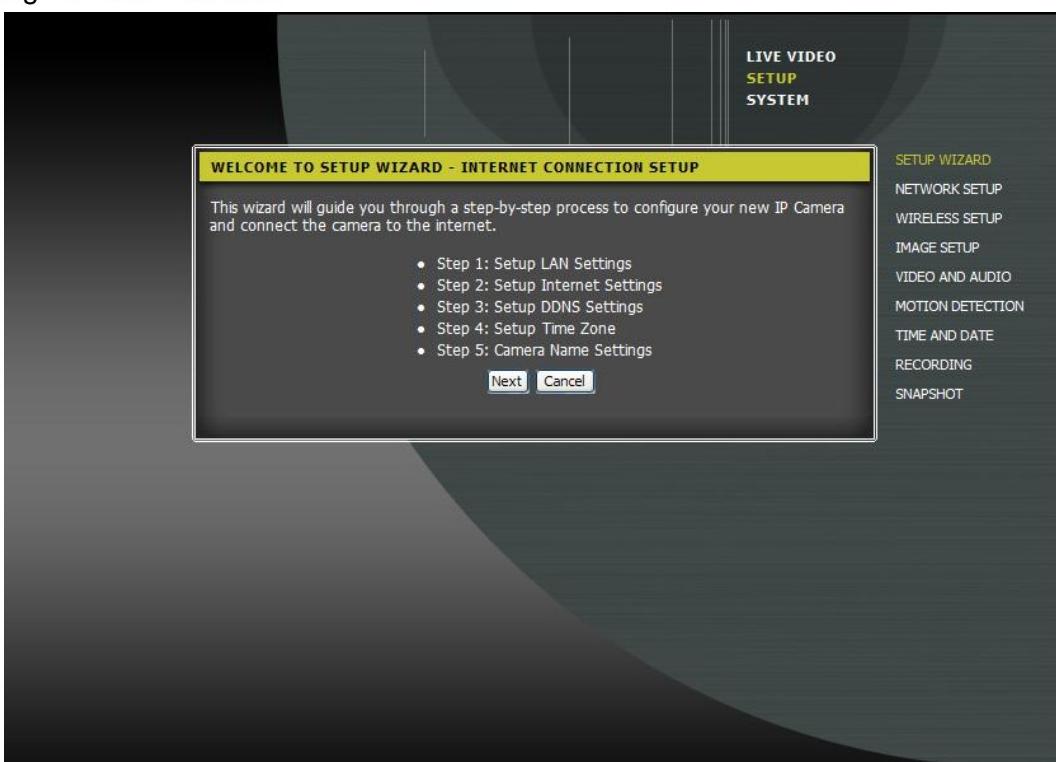


Name	Function
(1) Camera Info	Display current date, time, and name of camera.
(2) resolution mode	Click the resolution buttons (  ~  ) to view. The buttons of resolution values may change depends on the <b>Video and Audio Setting</b> (see also <a href="#">Chapter 3.3.5</a> )  640 x 480, 30FPS, and MPGE4(default)  320 x 240, 30FPS, and MPGE4(default)  640 x480, 10FPS, and JPEG(default)  160 x 120, 5FPS, and MPGE4(default)  Full screen mode. Press <b>ESC</b> can switch back to the original display mode.
(3) Snapshot	Capture a video image. The image will pop up in new windows. User may save the image to a local hard drive.
(4) Record	Recording the video
(5) Storage Path	Set a storage path for saving recorded file. The default storage path is created when the Live Video Viewer is activated.
(6) Audio	Enable/disable sound.
(7) 2-Way Talk	Enable/disable 2-way audio function. This function allows the user site and camera site to talk via internet using MIC. Make sure your microphone and speakers work before using this function.
(8) Setup	Setup the IP camera settings (see also <a href="#">Chapter 3.3</a> ).

Name	Function
(9) System setup	Configuring the camera system parameters(see also <a href="#">Chapter 3.4</a> )
(10) Live video	Indicate the video is real-time.
(11) Motion detection	The motion detection icon appears yellow when motion is detected. Motion detection must be configured in the Motion Detection menu in the <b>Setup</b> section (see also <a href="#">Chapter 3.3.6</a> ).
(12) Record indicator	When recording is activated, the REC icon will light up.
(13) Language	Change the language of the menu interface and function tips.

### 3.3 IP Camera Setup

Click  to switch to IP camera setup menu that user can configure network settings, wireless, video and other settings of the IP camera.



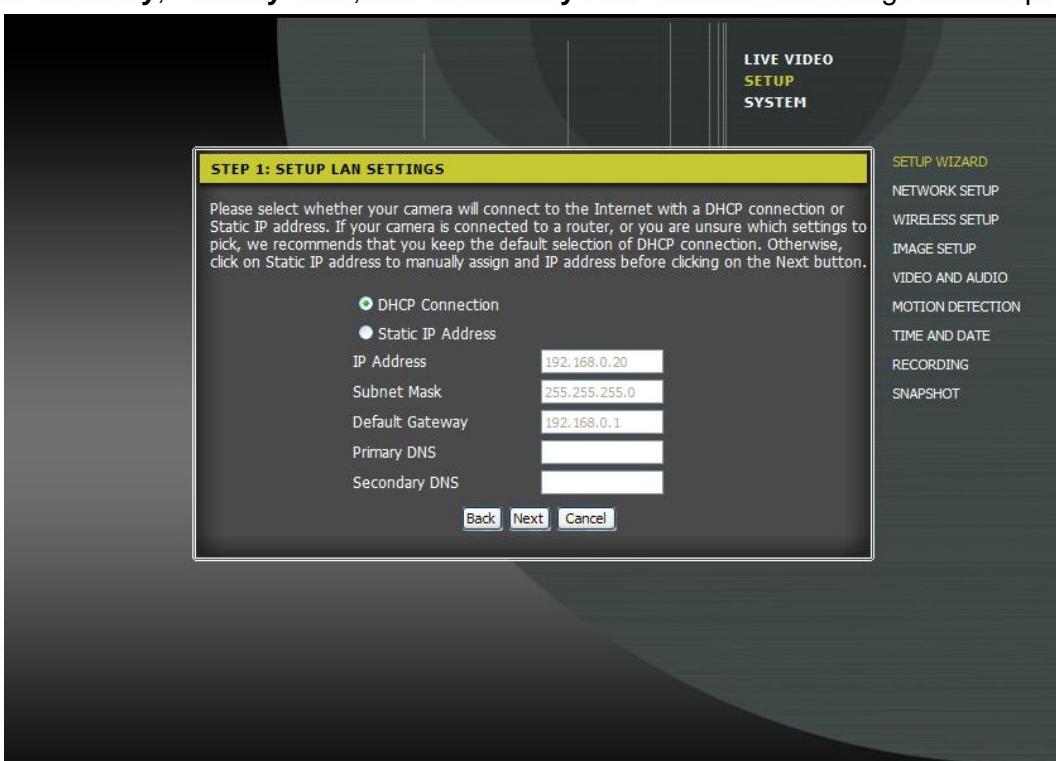
#### 3.3.1 Setup Wizard

In Setup menu, user can follow the setup wizard to configure the camera in few and quick steps. Click **Next** to start configuring.

##### ■ STEP 1: SETUP LAN SETTINGS

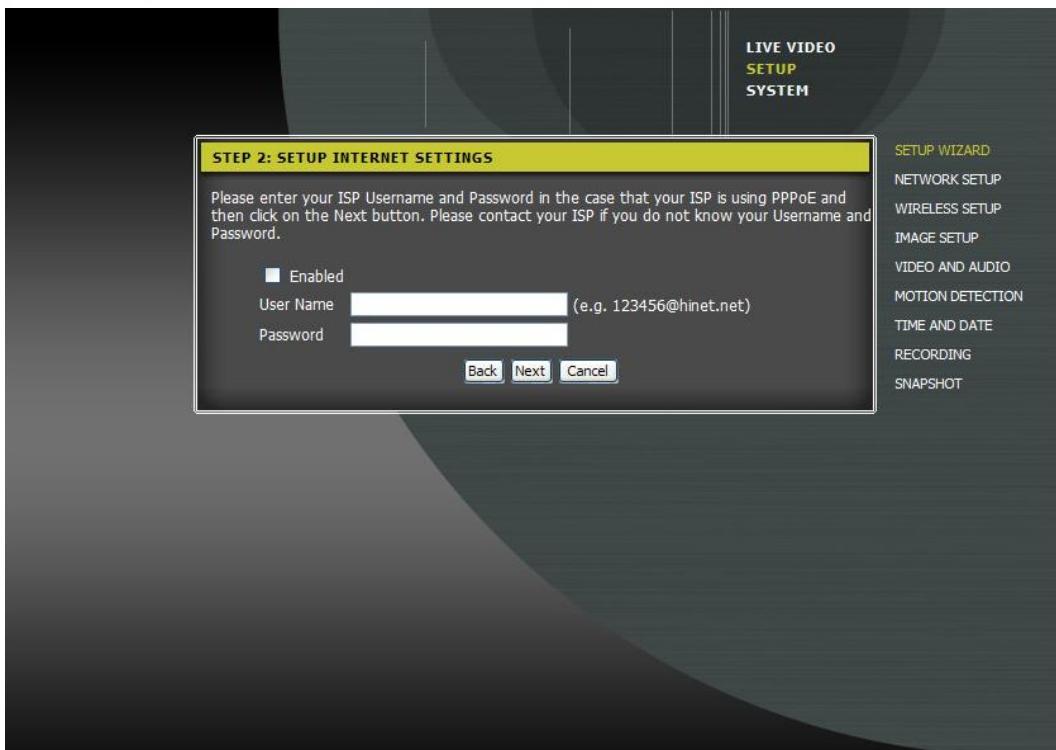
Configure the IP setting of the IP camera.

- **DHCP Connection:** Assign the IP address by local DHCP server to the IP camera.
- **Static IP Address:** Assigns a constant IP address to the IP camera. Fill in **IP Address**, **Subnet Mask**, **Default Gateway**, **Primary DNS**, and **Secondary DNS** and click **Next** to go next step.



## ■ STEP 2: SETUP INTERNET SETTINGS

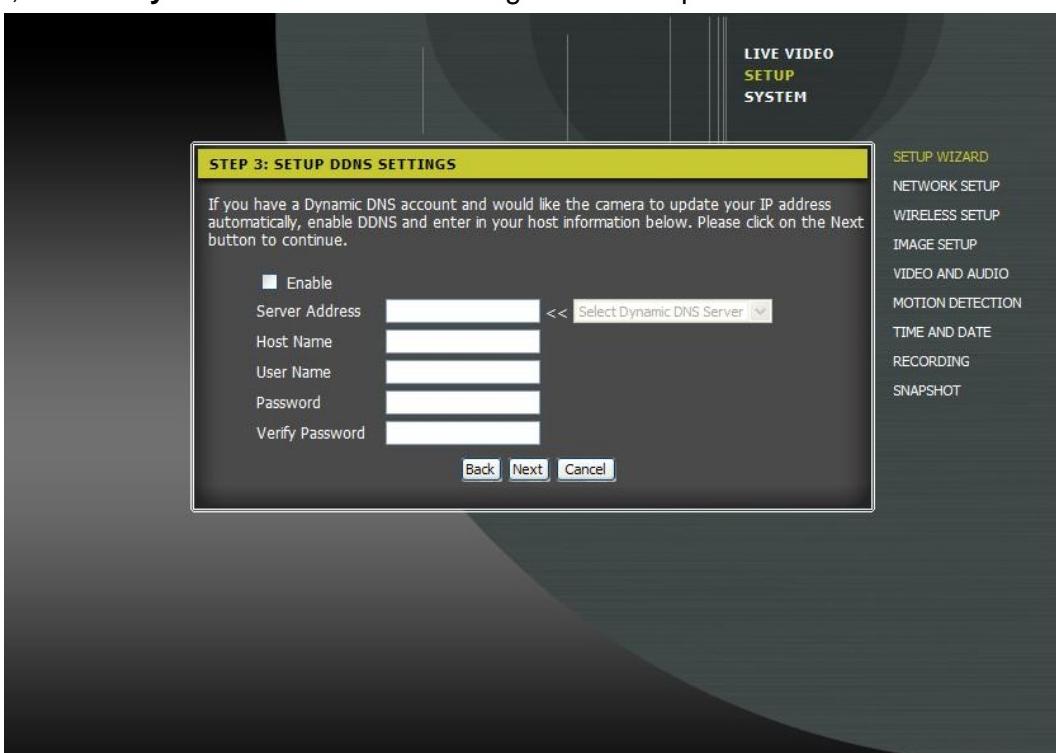
If your ISP require connection authentication, mark **Enable** and enter the **User Name** and **Password** that your ISP provides to you. Click **Next** to go the next steps.



## ■ STEP 3: SETUP DDNS SETTINGS

Dynamic Domain Name Service is a data query service mainly used on the Internet for translating domain names into IP addresses.

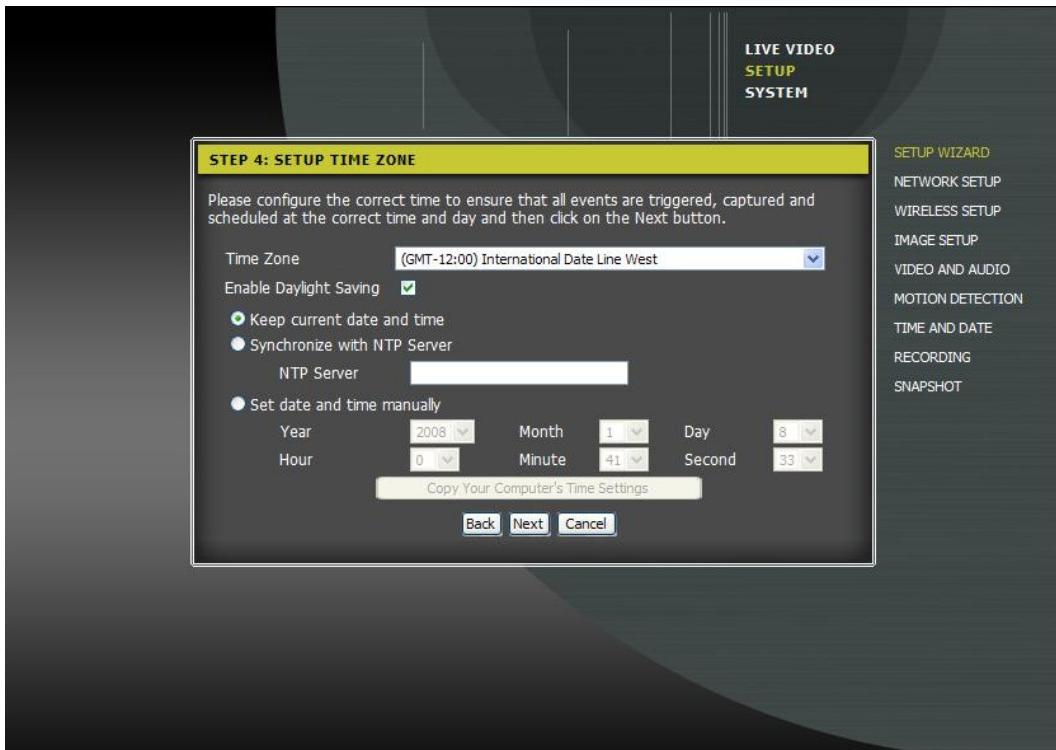
Mark **Enable** and enter **Server Address** of DNS or select from drop-down list, **Host Name**, **User Name**, **Password**, and **Verify Password**. Click **Next** to go to next step.



## ■ STEP 4: SETUP TIME ZONE

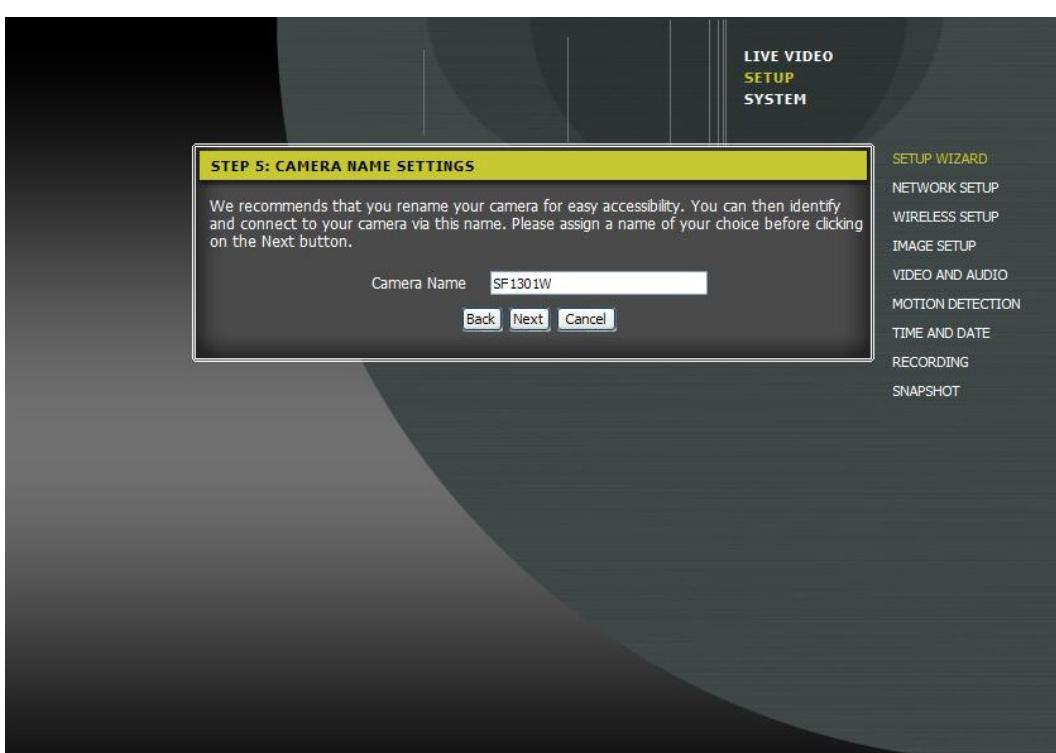
Setup the system time of the camera. Click **Next** to go to next step.

- **Time Zone:** Select the time zone that IP camera is located.
- **Enable Daylight Saving:** Enable/disable daylight saving function if the time zone that camera is located has daylight saving time.
- **Keep current date and time:** The time will be user has been setup.
- **Synchronize with NTP Server:** To adjust the time by **NTP server** that user has setup.
- **Set date and time manually:** To adjust the date and time manually. Select the **Year, Month, Day, Hour, Minute, and Second** from drop-down list. Or click **Copy Your Computer's Time Settings** to get the date and time setting directly from your PC.



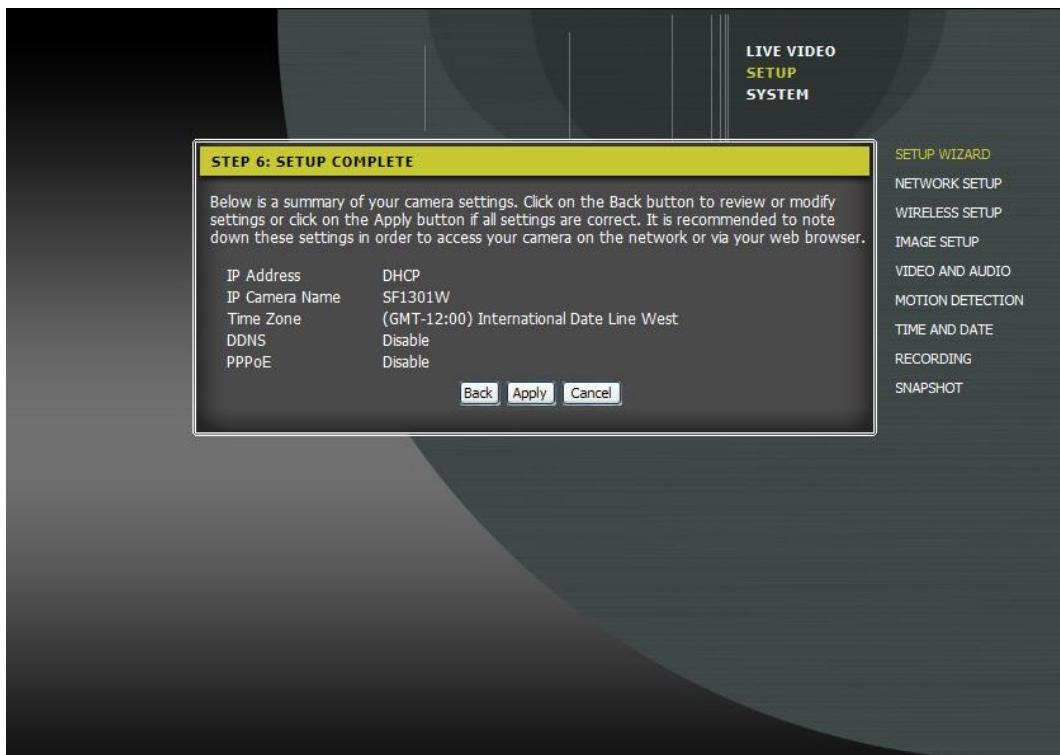
## ■ STEP 5: CAMERA NAME SETTINGS

Give a name to the IP camera. Default is model name of the IP camera. Click **Next** to complete the setup process.



## ■ STEP6: SETUP COMPLETE

Click **Apply** to save the configuration. To go back to last step, click **Back**. Click **Cancel** will back to the step 1 of Setup Wizard.



### 3.3.2 Network Settings

Click the **Network Setup** to configure IP settings, PPPoE, DDNS and HTTP or RTSP port. Click **Save** to save the settings and click **Cancel** to exit without save.

The screenshot shows the 'Network Settings' configuration page with three main sections:

- LAN**:
  - Connection type: DHCP Connection (selected)
  - IP Address: 192.168.0.137
  - Subnet Mask: 255.255.255.0
  - Default Gateway: 192.168.0.254
  - Primary DNS: 168.95.1.1
  - Secondary DNS: 168.95.192.1
  - Enable UPnP: checked
  - Enable UPnP port forwarding: checked
  - External HTTP port: 80
  - External RTSP port: 554
  - Enable PPPoE: unchecked
  - User Name: [redacted]
  - Password: [redacted]
  - Confirm password: [redacted]
- DYNAMIC DNS SETTING**:
  - Enable DDNS: unchecked
  - Server Address: [redacted] << Select Dynamic DNS Server >>
  - Host Name: [redacted]
  - User Name: [redacted]
  - Password: [redacted]
  - Verify Password: [redacted]
  - Timeout: 255 (hours)
  - Status: Disable
- PORT DETAIL SETTINGS**:
  - HTTP port: 80
  - RTSP port: 554
  - User authentication: unchecked

At the bottom are 'Save' and 'Cancel' buttons.

#### 3.3.2.1 NETWORK SETTINGS

The IP address of the camera can be assigned by local DHCP server automatically or assign a static IP address as needed for the private network.

- **DHCP Connection:** Assign the IP address by local DHCP server to the camera.
- **Static IP Address:** Assigns a constant IP address to the camera. Fill in **IP Address**, **Subnet Mask**, and **Default Gateway**, **Primary DNS**, and **Secondary DNS**.
- **Enable UPnP:** To allow Windows base PCs to find this camera under **Network Neighborhood** without configuration.
- **Enable UPnP port forwarding:** To allow the camera to add a port forwarding entry into network router automatically when checked, if network router supports UPnP port forwarding.
- **External HTTP port:** Set a HTTP port for UPnP port forwarding.
- **External RTSP port:** Set a RTSP port for UPnP port forwarding.

**i** Port forwarding/mapping must be enabled on Network router/gateway for remote viewing of camera video via the internet. Please refer to the user's manual of router to enable port forwarding/mapping function.

- **Enable PPPoE:** For PPPoE client Internet access. Fill in the **User Name**, **Password**, and **Confirm password** for accessing authentication.

**NETWORK SETTINGS**

**LAN**

DHCP Connection  
 Static IP Address

IP Address: 192.168.0.137  
Subnet Mask: 255.255.255.0  
Default Gateway: 192.168.0.254  
Primary DNS: 168.95.1.1  
Secondary DNS: 168.95.192.1

Enable UPnP  
 Enable UPnP port forwarding

External HTTP port: 80  
External RTSP port: 554

Enable PPPoE

User Name: [redacted]  
Password: [redacted]  
Confirm password: [redacted]

### 3.3.2.2 DYNAMIC DNS SETTING

Dynamic Domain Name Service is a data query service mainly used on the Internet for translating domain names into IP address. If ISP provider assigns dynamic IP for every time user make connection, enable DDNS service and the IP camera will update IP address automatically to DDNS server when the IP camera get a different IP address.

Mark **Enable** and enter **Server Address** of DNS or select from drop-down list, **Host Name**, **User Name**, **Password**, and **Verify Password**. Enter a time period of connection with DNS server in **Timeout(hours)** column.

**DYNAMIC DNS SETTING**

Enable DDNS

Server Address: [redacted] << Select Dynamic DNS Server

Host Name: [redacted]  
User Name: [redacted]  
Password: [redacted]  
Verify Password: [redacted]

Timeout: 255 (hours)

Status: Disable

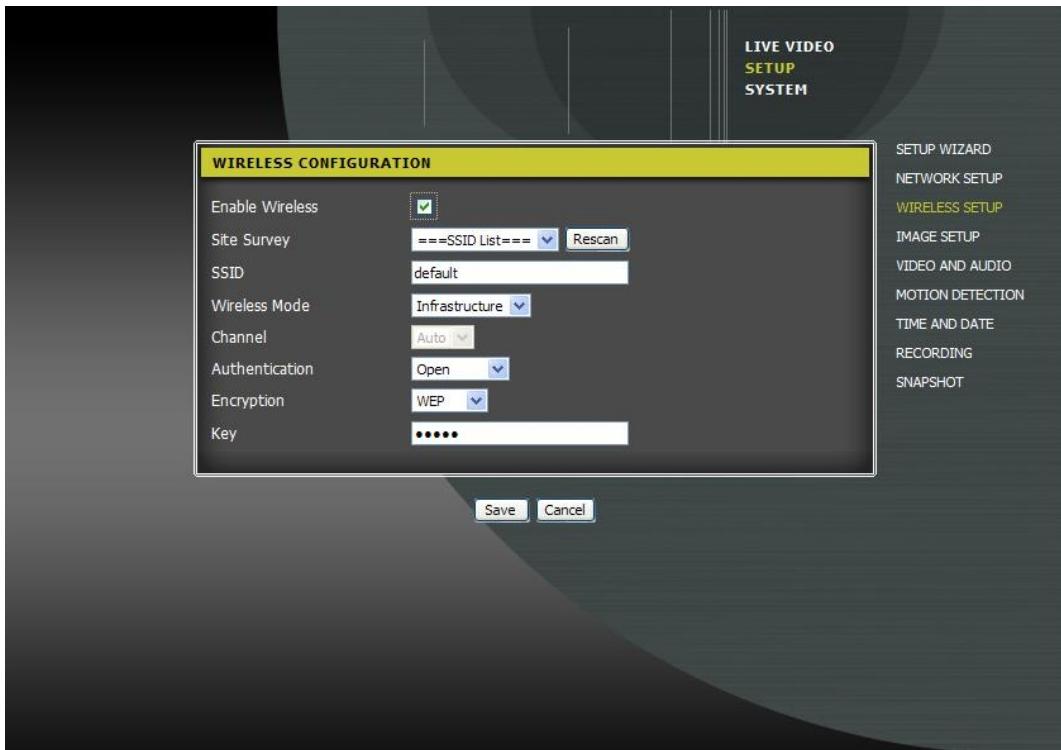
### 3.3.2.3 PORT DETAIL SETTINGS

To configure the **HTTP port** for web access and **RTSP port** for mobile access. Enable **User authentication** to require the access authentication.

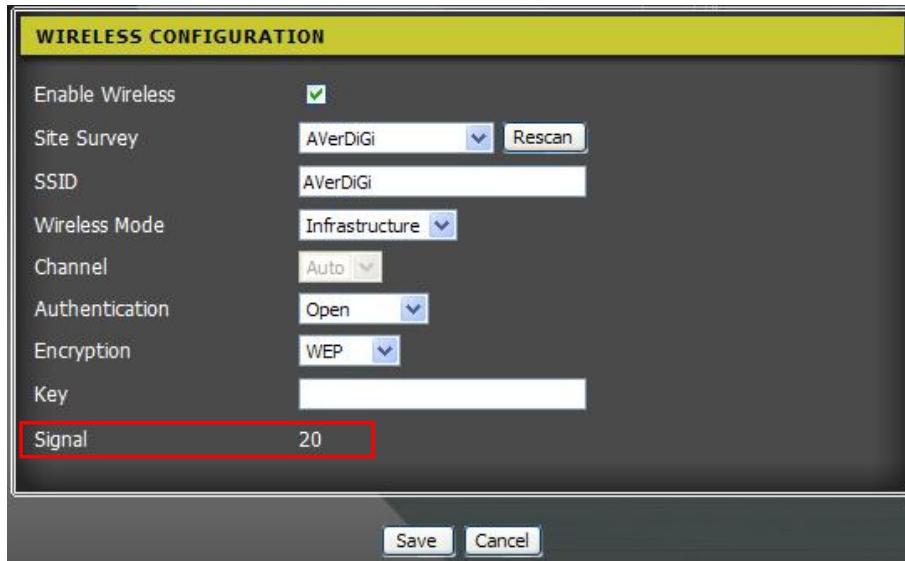
PORT DETAIL SETTINGS	
HTTP port	80
RTSP port	554
<input type="checkbox"/> User authentication	

### 3.3.3 Wireless Setup

The Wireless IP Camera supports 802.11g protocol that is including WEP or WPA basic security settings. The wireless camera also supports WPS (Wi-Fi Protected Setup) for quick and easy wireless security setup. Click **Save** to complete the configuration, **Cancel** to discard the setting.



- **Enable Wireless:** Mark to enable wireless function.
- **Site Survey:** When wireless function is enabled, the camera system will automatically scan the available wireless AP devices on the network. Select the wireless AP from drop-down list to connect. When user selects the wireless AP device, the degree of signal will be display at bottom of the screen. Click **Rescan** to search available AP devices again.

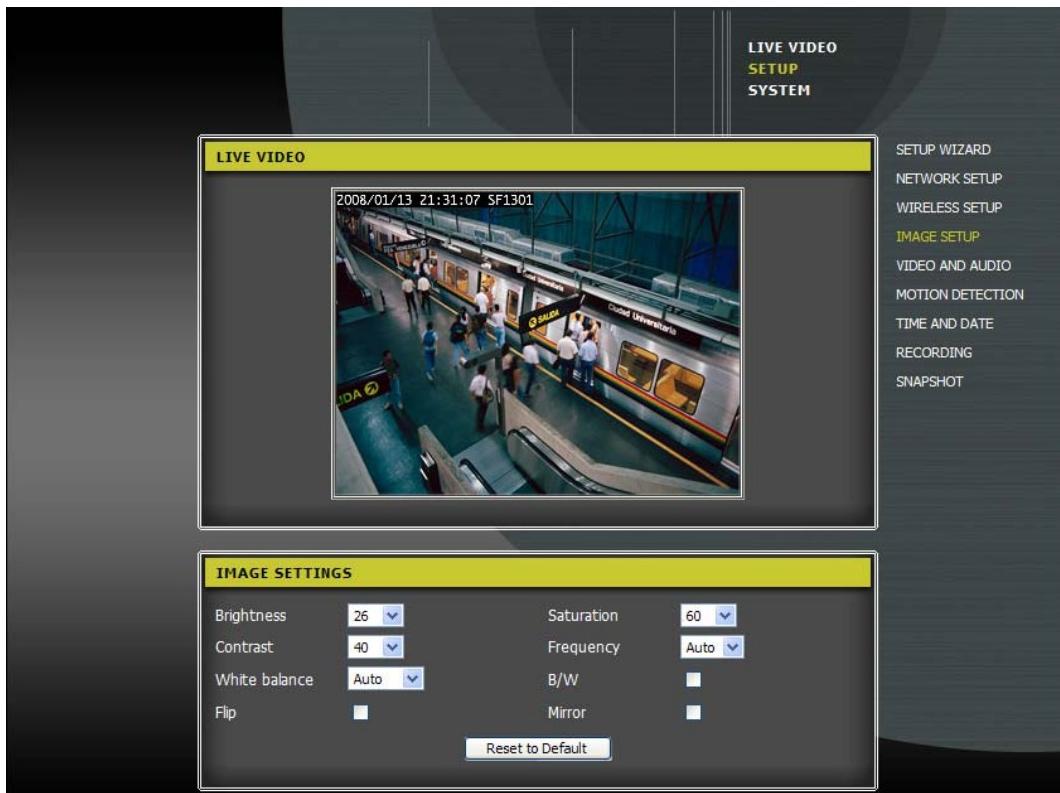


- **SSID:** SSID (Service Set Identity) is the ID assigned to the wireless AP(Access Point). The camera system will auto-detect and display the SSID of wireless AP.
- **Wireless Mode:** Select the **Infrastructure** (default) as the wireless mode. If your network is using a network connection directly between the devices without wireless AP, and then, select the **Ad-Hoc** as the wireless mode.
- **Channel:** Select the channel for communicate with the wireless AP or select Auto. Then channel selection is depending on the regulatory region where the AP device is sold.
- **Authentication:** Select the type of authentication that user has used on the network - **Open**, **Shared**, **WPA-PSK**, or **WPA2-PSK**.

- **Encryption:** If select **WPA-PSK** or **WPA2-PSK** authentication, user needs to specify whether the wireless network uses **TKIP** or **AES** encryption. If select **Open** or **Shared** authentication, the setting will be automatically set.
- **Key:** For **WEP**, **WPA-PSK**, or **WPA2-PSK** authentication, enter the **Key** (also known as password) used for the wireless network.

### 3.3.4 Image Setup

To adjust the brightness, saturation, contrast, frequency, and white balance of the image.



Video image settings

#### ■ Brightness/ Saturation/Contrast/Frequency/White Balance

From drop-down list select the value that user wants. User can preview the adjusted image from Live Video windows. Click **Reset to Default** can set all adjustment back to factory default setting.

#### ■ Flip

Enable to turn the image upside down.

#### ■ B/W

Change the image to black and white color.

#### ■ Mirror

Flip the image in horizontally direction.



The Flip and Mirror can be used when the camera is hanging on the ceiling upside down.

### 3.3.5 Video and Audio Settings

To setup resolution, encode FPS, bps, JPEG quality, and RTSP URL of video output. The video setting is related to the resolution buttons on the Live Video Viewer (see also [Chapter 3.2](#)) .Click **Save** to change the setting. The camera will reboot automatically when the setting is changed.

The screenshot displays the 'Video and Audio Settings' configuration page. It includes sections for 'VIDEO SENSOR', 'VIDEO PROFILE 1', 'VIDEO PROFILE 2', 'VIDEO PROFILE 3', 'VIDEO PROFILE 4 FOR MOBILE DEVICE ONLY', 'NIGHT MODE', and 'AUDIO SETUP'. The 'VIDEO SENSOR' section allows selecting Sensor Output (VGA (640x480), XGA (1024x768), or SXGA (1280x1024)). The 'VIDEO PROFILE' sections provide detailed settings for each profile, including Encode Type (MPEG4 or JPEG), Resolution, FPS, bps, JPEG Quality, and RTSP URL. The 'NIGHT MODE' section contains a note about frame rate reduction in dim environments and settings for Enable Night Mode and Shutter speed. The 'AUDIO SETUP' section includes options for enabling speakers and microphones and setting their volumes. At the bottom are 'Save' and 'Cancel' buttons.

Profile	Encode Type	Resolution	FPS	bps	JPEG Quality	RTSP URL
VIDEO PROFILE 1	MPEG4	640x480	30	2 Mbps	Excellent	play1.sdp
VIDEO PROFILE 2	MPEG4	320x240	30	1 Mbps	Standard	play2.sdp
VIDEO PROFILE 3	JPEG	640x480	10	--	Excellent	play3.sdp
VIDEO PROFILE 4 FOR MOBILE DEVICE ONLY	MPEG4	160x120	5	256 Kbps	--	3gpp

- **Video Sensor:** Set the camera's sensor output to VGA quality (640x640), XGA quality (1024x768), or SXGA quality (1280x1024).



When using SXGA mode, motion detection and motion triggered will be disabled.

- **Profile 1:** Setup the video setting of resolution button ( ) 1 which is located on the Live Video Viewer UI. All the value settings are related to the **Sensor Output** that user has chosen.

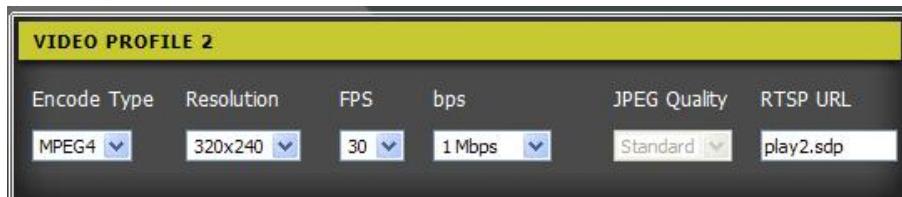


- **Encode Type:** select encode type of video – **MPEG4** or **JPEG**.
- **Resolution:** Available resolutions are related to **Sensor Output** and **Encode Type**. For **1280 x 1024** resolution, please select **SXGA** and **JPEG** encode type.



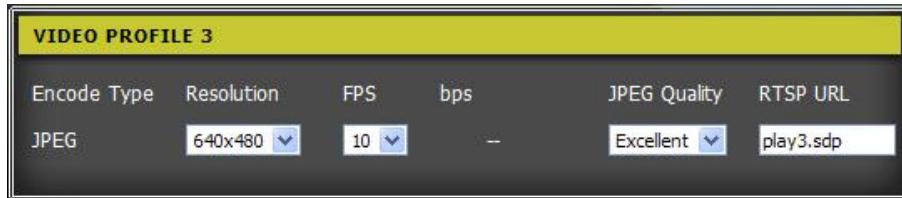
Only **SXGA** sensor output supports 1280 x 1024 resolution at Profile 1.

- **FPS:** Select the frame rate.
  - **bps:** Select the bit rate per second. Only when encode type is MPEG4, the bps can be setup.
  - **JPEG Quality:** Select the quality of video. Only when encode type is JPEG, the JPEG quality can be selected.
  - **RTSP URL:** Enter the URL for RTSP connection.
- **Profile 2:** Setup the video setting of resolution button ( ) 2 which is located on the Live Video Viewer UI. All the value settings are related to the **Sensor Output** that user has chosen.



- **Encode Type:** select encode type of video – **MPEG4** or **JPEG**.
- **Resolution:** Available resolutions are related to **Sensor Output** and **Encode Type**.
- **FPS:** Select the frame rate.
- **bps:** Select the bit rate per second. Only when encode type is **MPEG4**, the bps can be setup.
- **JPEG Quality:** Select the quality of video. Only when encode type is **JPEG**, the JPEG quality can be selected.
- **RTSP URL:** Enter the URL for RTSP connection.

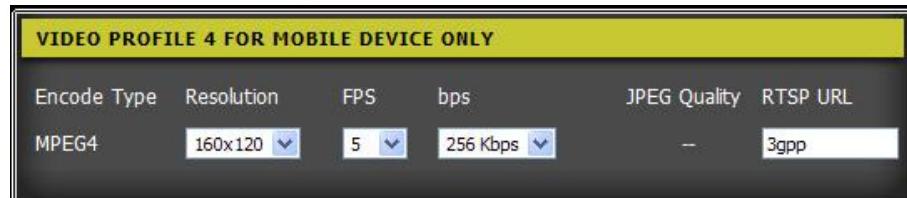
- **Profile 3:** Setup the video setting of resolution button ( ) 3 which is located on the Live Video Viewer UI. All the value settings are related to the **Sensor Output** that user has chosen.



- **Encode Type:** Only support **JPEG**.
- **Resolution:** Available resolutions are related to **Sensor Output**.
- **FPS:** Select the frame rate.
- **JPEG Quality:** Select the quality of video.

- **RTSP URL:** Enter the URL for RTSP connection.

- **Video Profile 4 for Mobile Device Only:** Setup the video setting of resolution button (4) 4 which is located on the Live Video Viewer UI. Profile 4 is the video setting for mobile accessing. All the value settings are related to the **Sensor Output** that user has chosen.



- **Encode Type:** Only support **MPEG4**.
- **Resolution:** Available resolutions are related to **Sensor Output**.
- **FPS:** Select the frame rate.
- **bps:** Select the bit rate per second. Only when encode type is **MPEG4**, the bps can be setup.
- **RTSP URL:** Enter the URL for RTSP connection.



Higher frame rate and bit rate provide better video quality but require more network bandwidth.

- **Night Mode:** When in low light situations, enable the **Night Mode**.

#### ■ **Audio Setup:**

- **Enable Speaker:** Enable to output audio to an external speaker that is attached to the external speaker jack of the camera. This allows user to talk with another person through the camera.
- **Volume:** Set the volume level of the external speaker.
- **Enable Microphone:** Enable to hear the audio receive by the camera's microphone. This allows user to hear what is happening near the camera.
- **Volume:** Set the volume level of the audio.

**NIGHT MODE**

When the Night Mode is selected, the actual frame rate might lower than Max Frame Rate setting above in dim environment.

Enable Night Mode

Shutter  Second

**AUDIO SETUP**

Enable Speaker

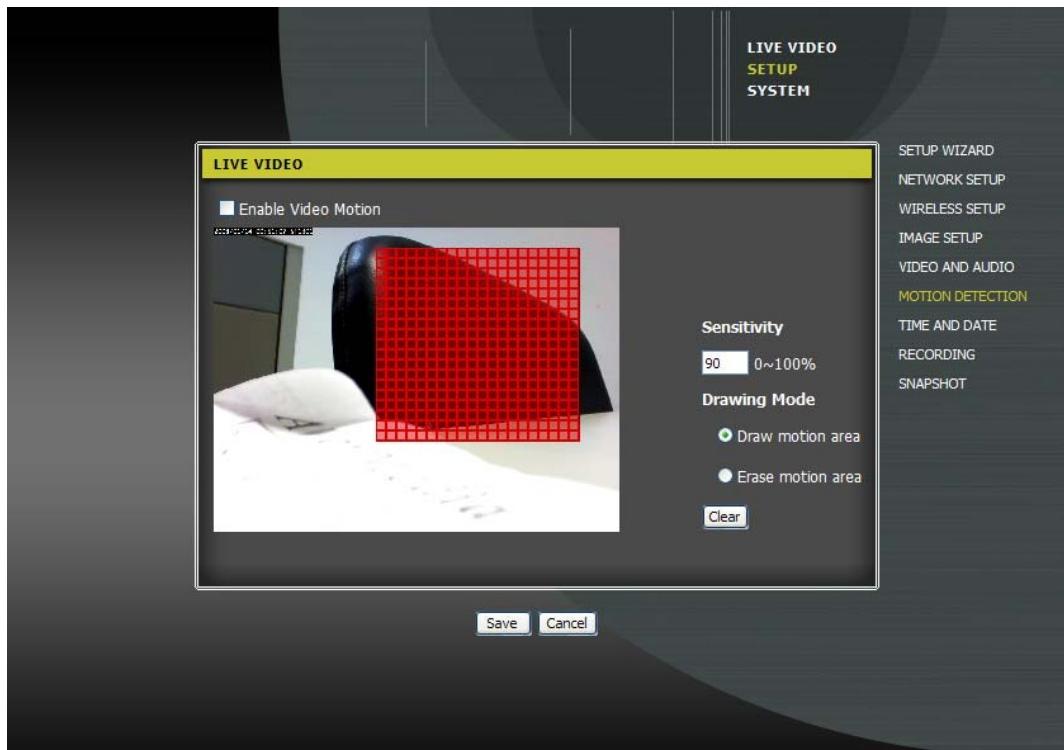
Volume

Enable Microphone

Volume

### 3.3.6 Motion Detection

Start recording the video from the selected area only when the camera detects movement. Mark **Enable Video Motion** to enable motion detection. Select **Draw motion area** and drag to select the area of motion detection. The selected area will appear a red box. To clear the selected area, select **Erase motion area** and drag on the selected area to clear. To clear all selected motion detected area, click **Clear** button. To adjust **Sensitivity**, enter the value 0 ~ 100. The higher the value, the finer the sensitivity is detected. Click **Save** to complete the setup.

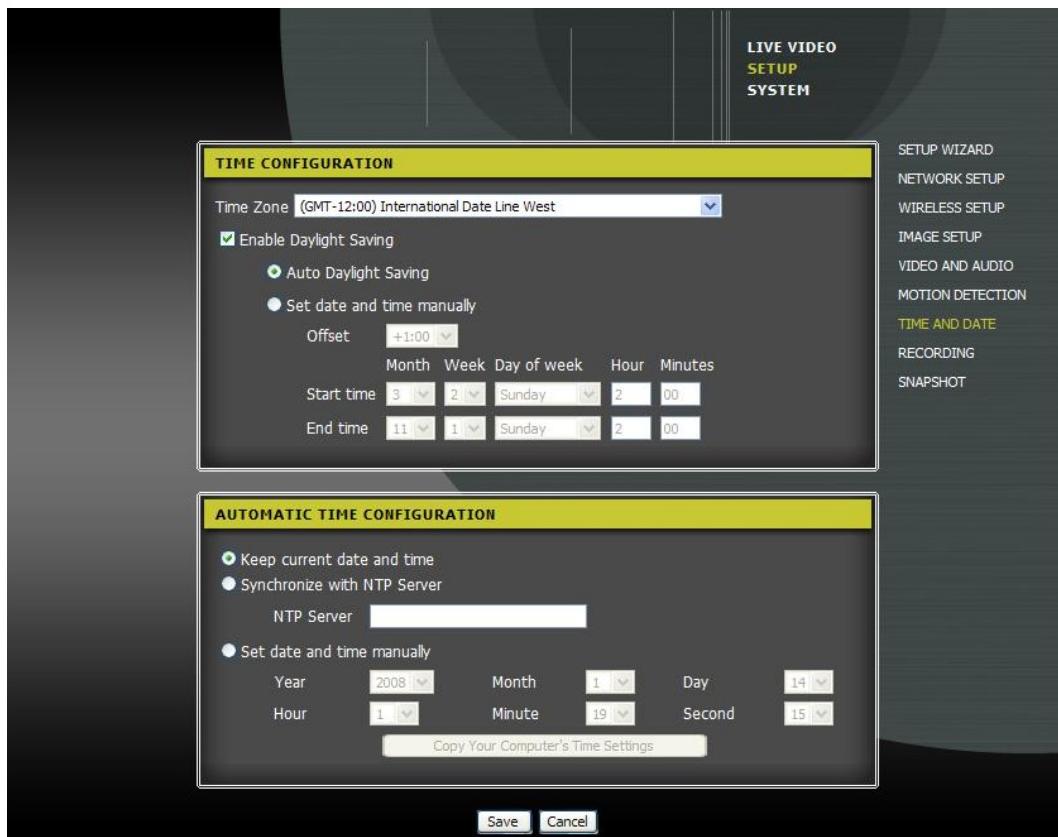


### 3.3.7 Time and Date

To configure, update, and maintain the correct time on the internal system clock.

#### ■ Time Configuration

- **Time Zone:** Select the time zone that the camera is located.
- **Enable Daylight Saving:** If it is during Daylight Saving period, enable **Daylight Saving** function.
  - **Auto Daylight Saving:** Select to adjust Daylight Saving Time automatically.
  - **Set date and time manually:** Mark check box to enable daylight saving. And then, select the **Start** and **End Time** from drop-down list.
  - **Offset:** Assign a time that it is for daylight saving time offset in your time zone. For example: if the time zone is in U.S. Eastern, the time offset is 1 hour.



#### ■ Automatic Time Configuration

- **Synchronize with NTP Server:** Enable to synchronize the camera time from NTP server.
- **NTP Server:** Enter the NTP server IP or URL for camera time synchronizes.
- **Set date and time manually:** Enable to set the time and date manually. Select the present **Year**, **Month**, **Day**, **Hour**, **Minute**, and **Second**. User can also click the **Copy Your Computer's Time Settings** button to automatically fill in with the present time and date from your computer.

### 3.3.8 Recording Setup

To setup recording related parameters.

- **Enable recording:** Enable the recording function. After enabling recording, user needs to select a location to save the recorded data, setup record mode and record schedule.



If the recording is not enabled, the recording button that is located on Live Video Viewer UI will not functional.

- **Record to:**
  - **Samba network drive:** Saving the record data on your network storage server.
  - **Samba Auth:** Select **Anonymous** if user name or password is not required for accessing the Samba drive. If user name and password is required, select the **Account** and fill in the **User name**, **Password**, and **Password confirm**.
  - **Server:** Enter the name of the server the Samba drive.
  - **Shared Folder:** Enter the path of the shared folder.
- **Recording Options**
  - **Resolution:** Select the resolution of the recording video. Those resolutions are set in **Video and Audio** section.
  - **Record until:** Setup a minimum buffer space of hard disk capacity. It is suggested set at least 32MB for buffer space.
  - **When storage is full:** When the storage capacity is full or has reached the space limit that is specified in **Record until**, user can choose to **Stop recording** or select **Overwrite older recordings** to delete old recordings.
- **Recording Method**
  - **Event Based:** Enable to record video when motion detected event happen.
    - **Motion detection triggered recording:** Enable to record video when motion is detected.
    - **Prerecord:** Setup how many seconds of video before the event happen will be recorded.
    - **Postrecord:** Setup how many seconds of video after the event happen will be recorded. For example: Set the **Prerecord** to **5** seconds and **Postrecord** to **9** seconds, the camera will save video from 5 seconds before motion was detected to 9 seconds after motion was detected.
  - **Continuous:** Enable the camera to record continuously.
  - **Scheduled:** Enable the camera to automatically record video during the specified times. Enable the day (Sun ~ Mon) and select the start time and end time.

## RECORDING

Enable recording

Record to:

Samba network drive

Samba Auth

User name

Password

Password  
confirm

Server

Shared folder

Samba status : Disable

Recording Options

Resolution

Record until  MB of free space is left (minimum is 32MB)

Recording  minutes a file

When storage is full:

Stop recording

Overwrite older recordings

Recording Method

Event Based

Motion detection triggered recording

Prerecord  seconds (range 0 to 15 seconds)

Postrecord  seconds (range 0 to 15 seconds)

Continuous (Samba only)

Scheduled (Samba only)

		Hours	Minutes	Hours	Minutes
<input checked="" type="checkbox"/>	Sun	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="24"/>	<input type="text" value="0"/>
<input checked="" type="checkbox"/>	Mon	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="24"/>	<input type="text" value="0"/>
<input checked="" type="checkbox"/>	Tue	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="24"/>	<input type="text" value="0"/>
<input checked="" type="checkbox"/>	Wed	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="24"/>	<input type="text" value="0"/>
<input checked="" type="checkbox"/>	Thu	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="24"/>	<input type="text" value="0"/>
<input checked="" type="checkbox"/>	Fri	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="24"/>	<input type="text" value="0"/>
<input checked="" type="checkbox"/>	Sat	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="24"/>	<input type="text" value="0"/>

### 3.3.9 Snapshot Setup

Set the camera to take snapshots when motion is detected. Snapshots image can be sent to an e-mail address and an FTP server. Click **Save** to save the settings.



The resolution of the snapshot image is based on **Profile 3** that user has setup in **Video and Audio** section.

■ **Enable Snapshot:** Mark to enable the snapshot function.

- **Scheduling:** Select the condition to trigger the snapshot.
  - **Event Based:** The condition to trigger the snapshot is based on the selected event.
  - ✓ **Motion detection:** The camera to take a snapshot when the motion is detected.



If the camera is set to **SXGA** mode in **Audio and Video**, motion detection snapshots is disabled.

- **Continuous (FTP only):** The snapshot image will be taken continuing. The snapshot image is taken under Continuous condition only can send to FTP server, not by e-mail.
- **Scheduled (FTP only):** The snapshot image will can be taken during the selected day and time period. Mark the Day (Sun~Mon) and select the start and end time. The snapshot image is taken under Scheduled condition only can send to FTP server, not by e-mail.

■ **Send to:** Setting the e-mail address to send the snapshot image. Click **Test** to check if the e-mail setting is workable.

- **E-mail Address:** Enable to send the snapshot image to the specific e-mail address.
  - **User Name:** Enter the username or login name for your e-mail account.
  - **Password:** Enter the password for your e-mail account.
  - **SMTP Mail Server:** Enter the SMTP server of your e-mail account.
  - **Sender E-mail Address:** Enter the sender's e-mail address.
  - **Recipient E-mail Address:** Enter the e-mail address that user wants to send the snapshot image to.

■ **FTP Server:** Enable to send the snapshots image to the specified FTP server. If you do not know what information to enter, contact the administrator of the FTP server for details. Click **Test** to check if the FTP setting is correct.

- **User Name:** Enter the user name of your FTP account.
- **Password:** Enter the password of your FTP account.
- **Host Name:** Enter the host name of your FTP account.
- **Path:** Enter the storage path on the FTP server that user wants to save the snapshots image.
- **Prefix Filename:** Enter the text word that user wants to attach to the snapshot image file name.
- **Port:** Enter the port used by the FTP server.
- **Interval:** Set a time gap for sending snapshot image to the FTP server. For example: The interval time is 10 second, and then every 10 seconds will send a snapshot image to the FTP server.
- **Passive Mode:** If the FTP server requires using the passive mode, mark the check box to enable it.

## SNAPSHOT

### Enable Snapshot

#### Scheduling

##### Event Based

###### Motion Detection

###### Continuous (FTP only)

###### Scheduled (FTP only)

		Hours	Minutes	Hours	Minutes
<input checked="" type="checkbox"/>	Sun	Start	0 : 0	End	24 : 0
<input checked="" type="checkbox"/>	Mon	Start	0 : 0	End	24 : 0
<input checked="" type="checkbox"/>	Tue	Start	0 : 0	End	24 : 0
<input checked="" type="checkbox"/>	Wed	Start	0 : 0	End	24 : 0
<input checked="" type="checkbox"/>	Thu	Start	0 : 0	End	24 : 0
<input checked="" type="checkbox"/>	Fri	Start	0 : 0	End	24 : 0
<input checked="" type="checkbox"/>	Sat	Start	0 : 0	End	24 : 0

#### Send to:

##### E-mail Address

User Name

Password

SMTP Mail Server

Sender E-mail Address

Recipient E-mail Address

Port

25 (range 1 to 65535)

##### FTP Server

User Name

Password

Host Name

Path

Prefix Filename

SF1301

Port

21 (range 1 to 65535)

Interval

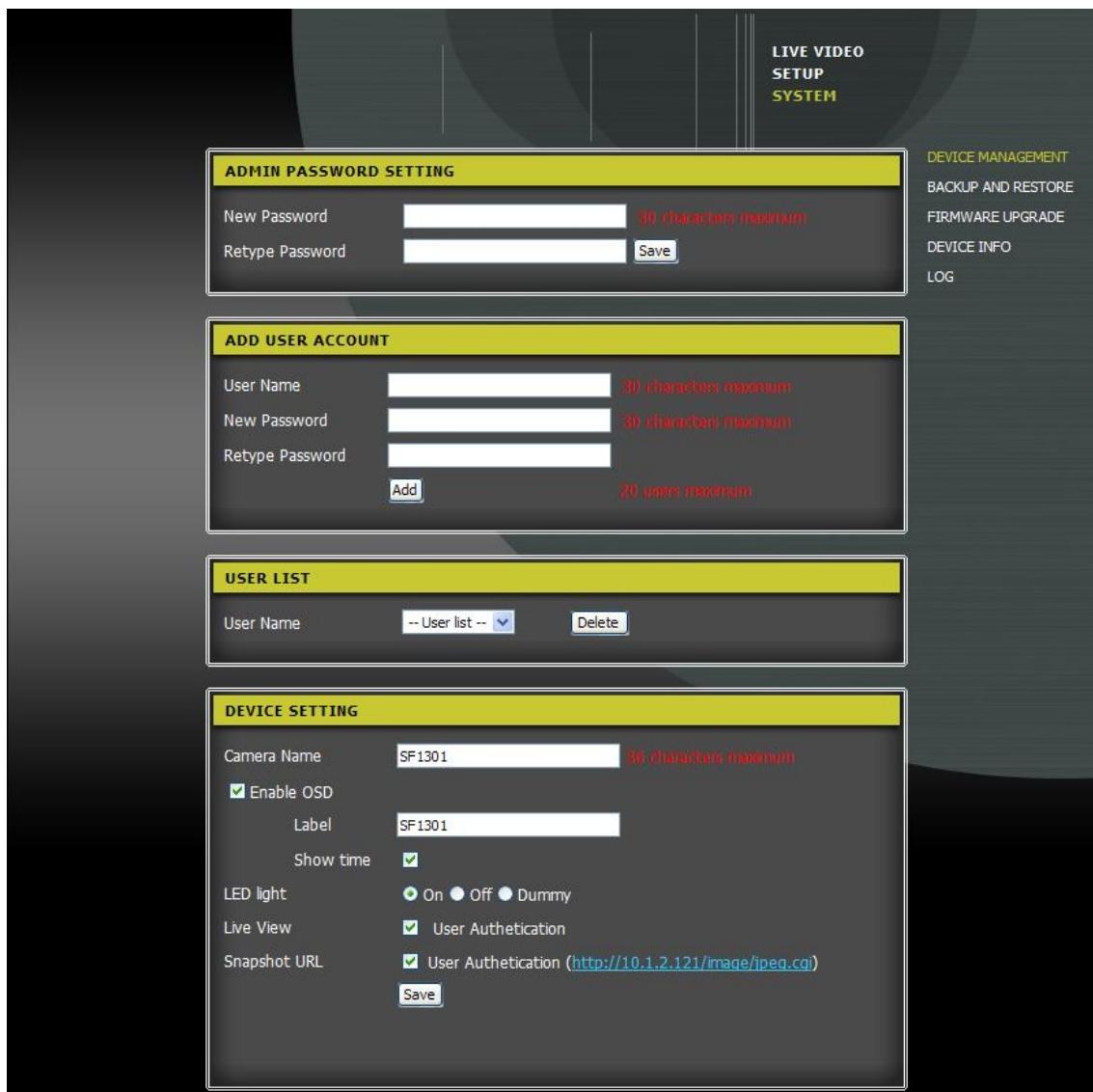
1 Seconds (range 1 to 86400 seconds)

Passive Mode

The resolution of snapshot is the video profile 3 resolution setting in [Audio and Video](#).

## 3.4 System Configuration

Click  from Live Video Viewer UI or click **SYSTEM** from Setup menu to switch to the camera system menu.



### 3.4.1 Device Management

In Device Management section, user can change administrator's password, create and manage user account, and modify name of camera.

- **Admin Password Setting:** User can change the password of admin account. For the security issue, we do strongly recommend that user changes the admin's password periodically. To change the password, enter the new password in **New Password** column and re-enter the new password again in **Retype Password** column. And then, click **Save** to complete the password changing.

- i** The password length maximum is 30 characters.

ADMIN PASSWORD SETTING	
New Password	30 characters maximum
Retype Password	Save

- **Add User Account:** Create the user account beside the admin account. User account only allow to view the live video, no authority of camera system setting. Enter the name of user account in **User Name** column, enter the password in **New Password** column, and enter the password again in **Retype Password** column. And then, click **Add** to create the user account.

- i**
- The user name and password length maximum is 30 characters.
  - The user account maximum is 20 accounts.

ADD USER ACCOUNT	
User Name	30 characters maximum
New Password	30 characters maximum
Retype Password	20 users maximum

- **User List:** To delete the un-wanted user account. Select the user account from drop-down list and click **Delete** to delete the account.

USER LIST	
User Name	-- User list --
	Delete

- **Device Setting:** Configure parameters of the camera.

- **Camera Name:** Give a name to the camera. The default name is camera model name.
  - **Enable OSD:** Enable/disable the label text and time display on Live Video Viewer UI.
    - ✓ **Label:** Enter the short name/description that will display on the Live Video Viewer UI.
    - ✓ **Show time:** Enable/disable to display the camera system time on the Live Video Viewer UI.
  - **LED light:** Select the LED indicator status – On, Off, or Dummy.
  - **Live View:** Enable/disable authentication when remote accessing the camera for viewing live video.
  - **Snapshot URL:** Enable/disable authentication when remote accessing the camera for viewing snapshot image.

**DEVICE SETTING**

Camera Name	SF1301	36 characters maximum	
<input checked="" type="checkbox"/> Enable OSD			
Label	SF1301		
Show time	<input checked="" type="checkbox"/>		
LED light	<input checked="" type="radio"/> On	<input type="radio"/> Off	<input type="radio"/> Dummy
Live View	<input checked="" type="checkbox"/> User Authentication		
Snapshot URL	<input checked="" type="checkbox"/> User Authentication ( <a href="http://10.1.2.121/image/jpeg.cgi">http://10.1.2.121/image/jpeg.cgi</a> )		
<input type="button" value="Save"/>			

### 3.4.2 Backup and Restore Setup

- **Save to Local Hard Drive:** Save the camera configuration to the locate hard disk. Click **Save Configuration** and the configuration will be save in \*.db format.
- **Load From Local Hard Drive:** Reload the configuration file that user has saved on local hard disk before back to the camera system.
- **Restore To Factory Defaults:** Set the camera system back to the factory default settings.
- **Reboot Device:** Click to restart the camera system.

**SYSTEM**

Save To Local Hard Drive	<input type="button" value="Save Configuration"/>
Load From Local Hard Drive	<input type="button" value="Browse..."/> <input type="button" value="Load Configuration"/>
Restore To Factory Defaults	<input type="button" value="Restore Factory Defaults"/>
Reboot Device	<input type="button" value="Reboot Device"/>

### 3.4.3 Firmware Upgrade

To upgrade the camera firmware. Please make sure the correct firmware file is located on the PC. Click the **Browse** to locate the file, and then click the **Upload** to load the file. After firmware updated, the camera will restart automatically.



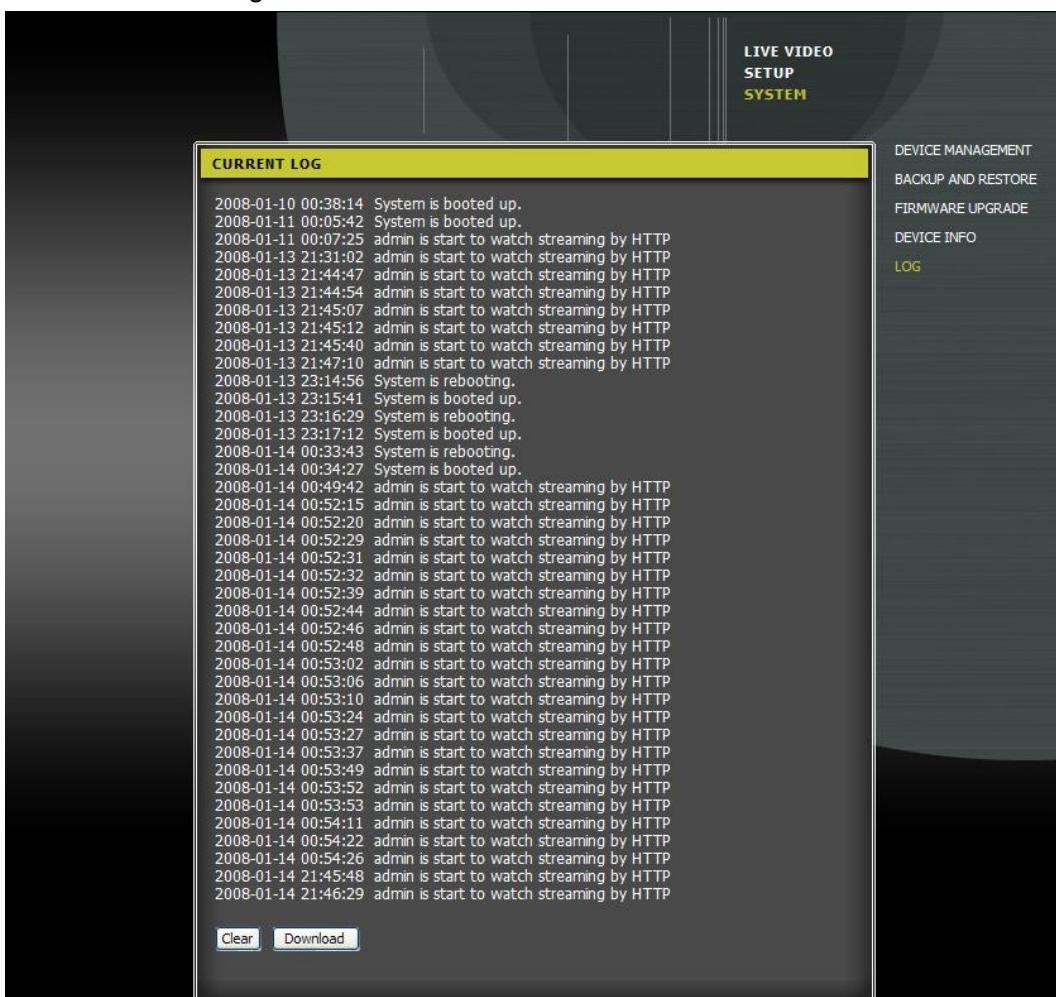
### 3.4.4 Device Information

Display the camera information such as camera name, time, firmware version, and network settings.



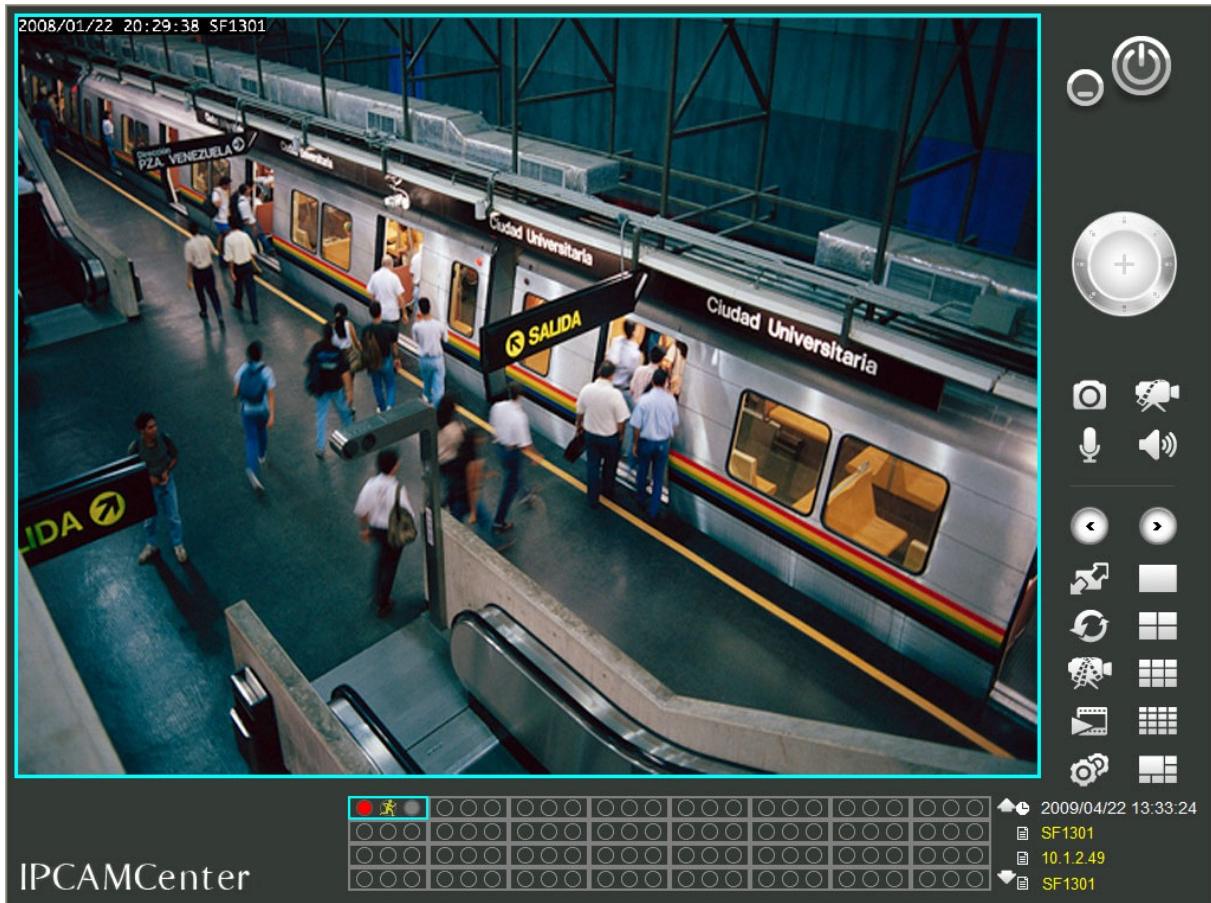
### 3.4.5 Camera Log

To view the camera's current log. To save the log in \*.text format on the local hard disk, click the **Download** button. Click **Clear** to delete all logs.



# Chapter 4 IPCamCenter

IPCamCenter can view multiple cameras' live view. Also, IPCamCenter can configure the camera one by one.



## 4.1 Install the IPCamCenter

Follow the below steps to install the IPCamWizard:

1. Insert the Installation CD into the CD-ROM drive on the PC.  
Click **IPCamCenter** to install.



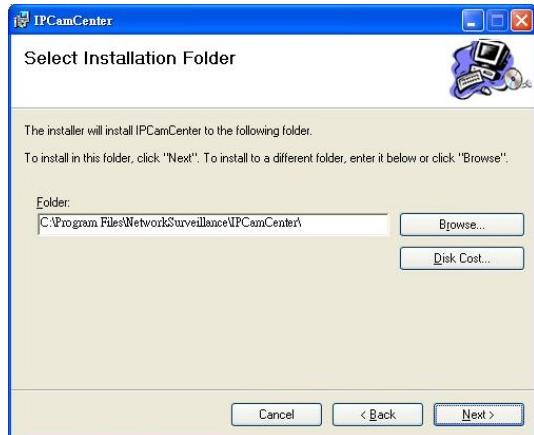
2. Click **Next**.



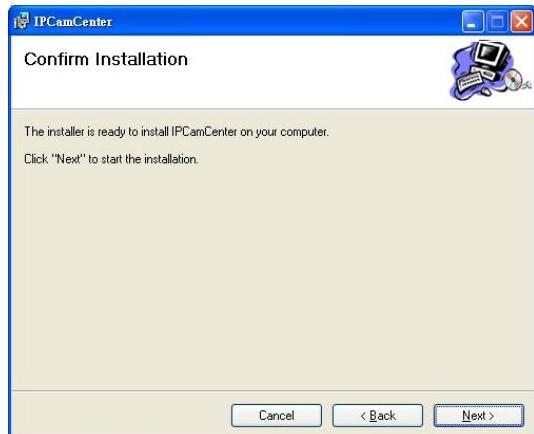
3. Read the license agreement and click **Yes** to accept the agreement.



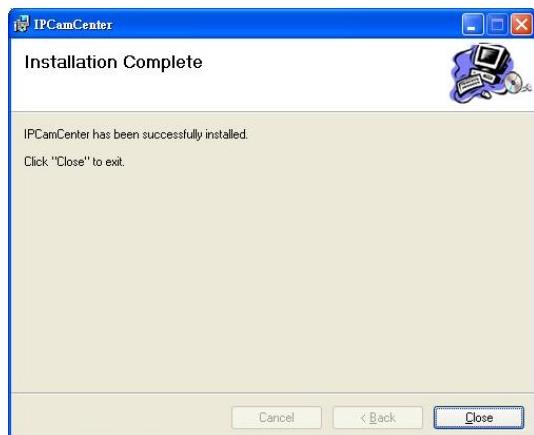
4. Click **Next** to continue the installation if user doesn't want to change the installation direction. To change the install direction, click **Browse...** and locate the new direction.



5. Click **Nex** to continue the installation.



6. Click the **Close** to complete the installation.

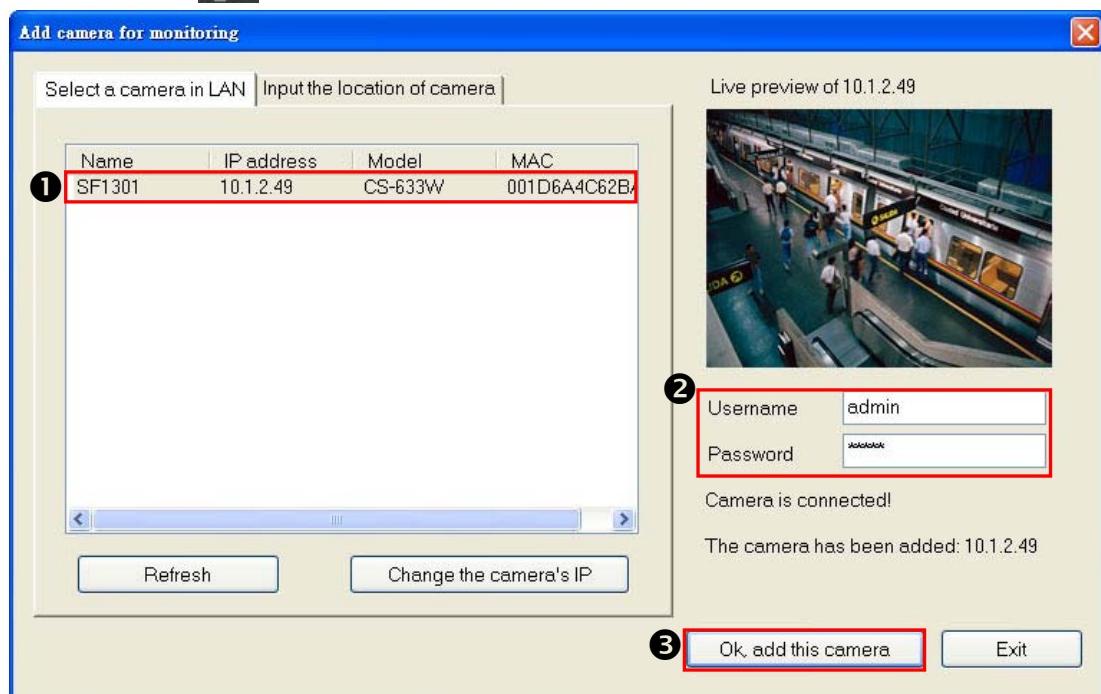


## 4.2 Using the IPCamCenter

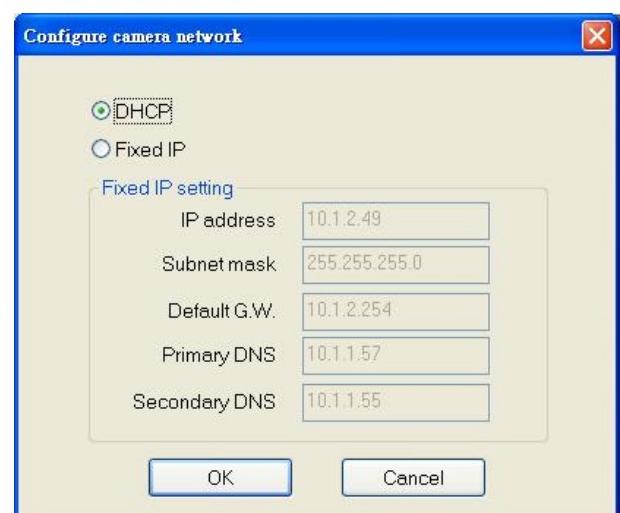
The IPCamCenter can connect with multiple cameras to view the camera live video. Also, user can configure the monitor camera through the IPCamWizard. To run the application, click **Start > Programs > NetworkSurveillance > IPCamCenter > IPCamCenter**.

### 4.2.1 To Connect the Camera

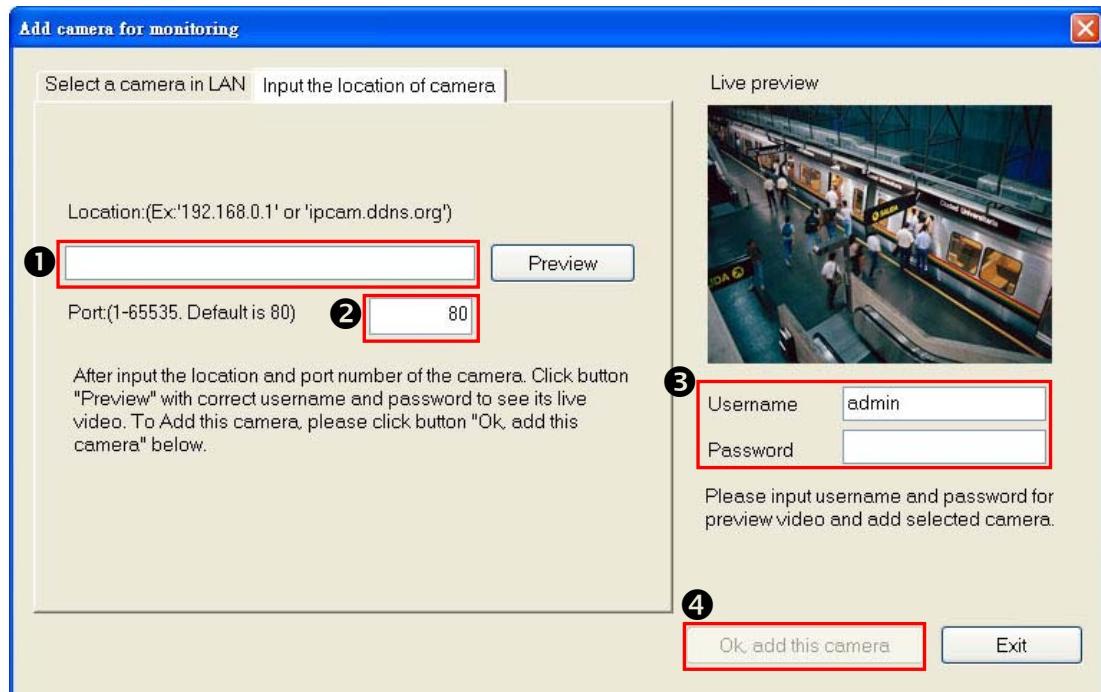
1. When the first time to run the **IPCamCenter**, the **Add camera for monitoring** windows will popup.
2. User also can click the  button on IPCamCenter UI and click **Add camera in local LAN**.



3. The IPCamCenter will auto detect the IP camera on the network. To add the camera, select the camera, enter the **Username** and **password** of the camera, and click **OK, add this camera**. The selected camera will be added and user should see the live video on preview screen. To search the camera again, click **Refresh**.
4. If user wants to change the IP address of camera, click **Change the camera's IP** and enter the **Administrator's id** and **Password**. Only **Administrator** has the authority can change the IP address of the camera. Select the type of IP (**DHCP** or **Fixed IP**) and fill in the new IP address and relate parameters if necessary. Click **OK** to complete the change.



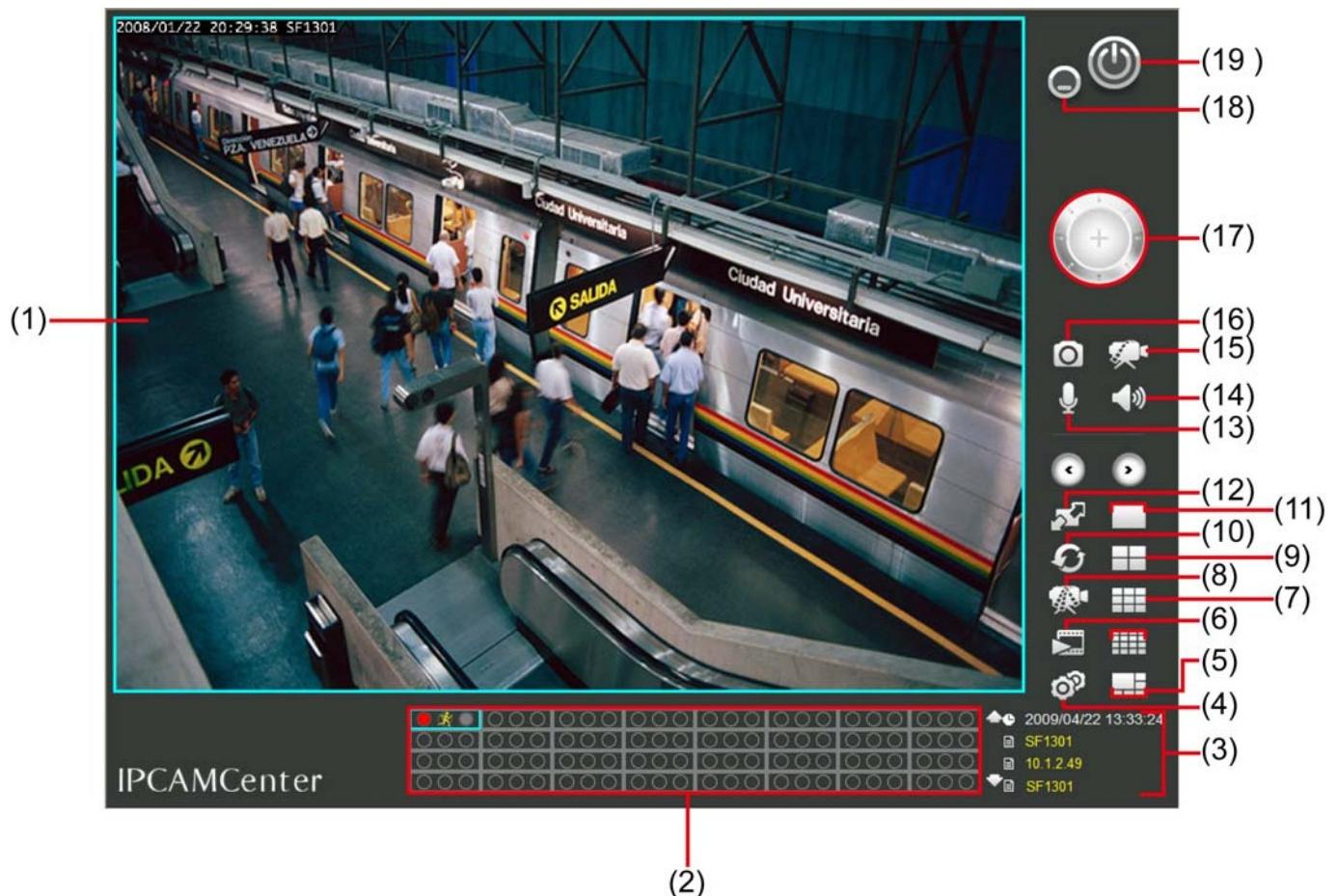
- User also can enter the **IP/URL** of the camera directly. Click **Input the location of camera** from Add camera for monitoring windows. User also can click  from IPCamCenter UI and click **Add camera by IP/URL**.
- To add a camera, enter the **IP Address/URL of the camera**, **Port number**, the **Username** and **password** of the camera, and click **OK, add this camera**. The selected camera will be added and user should see the live video on preview screen. Click **Preview** can refresh the video of the camera.



- Click **Exit** when finish the camera adding.

## 4.2.2 Familiarizing the Buttons in the IPCamCenter

To run the application, click Start > Programs > NetworkSurveillance > IPCamCenter >IPCamCenter. The main UI will appear as below shown:

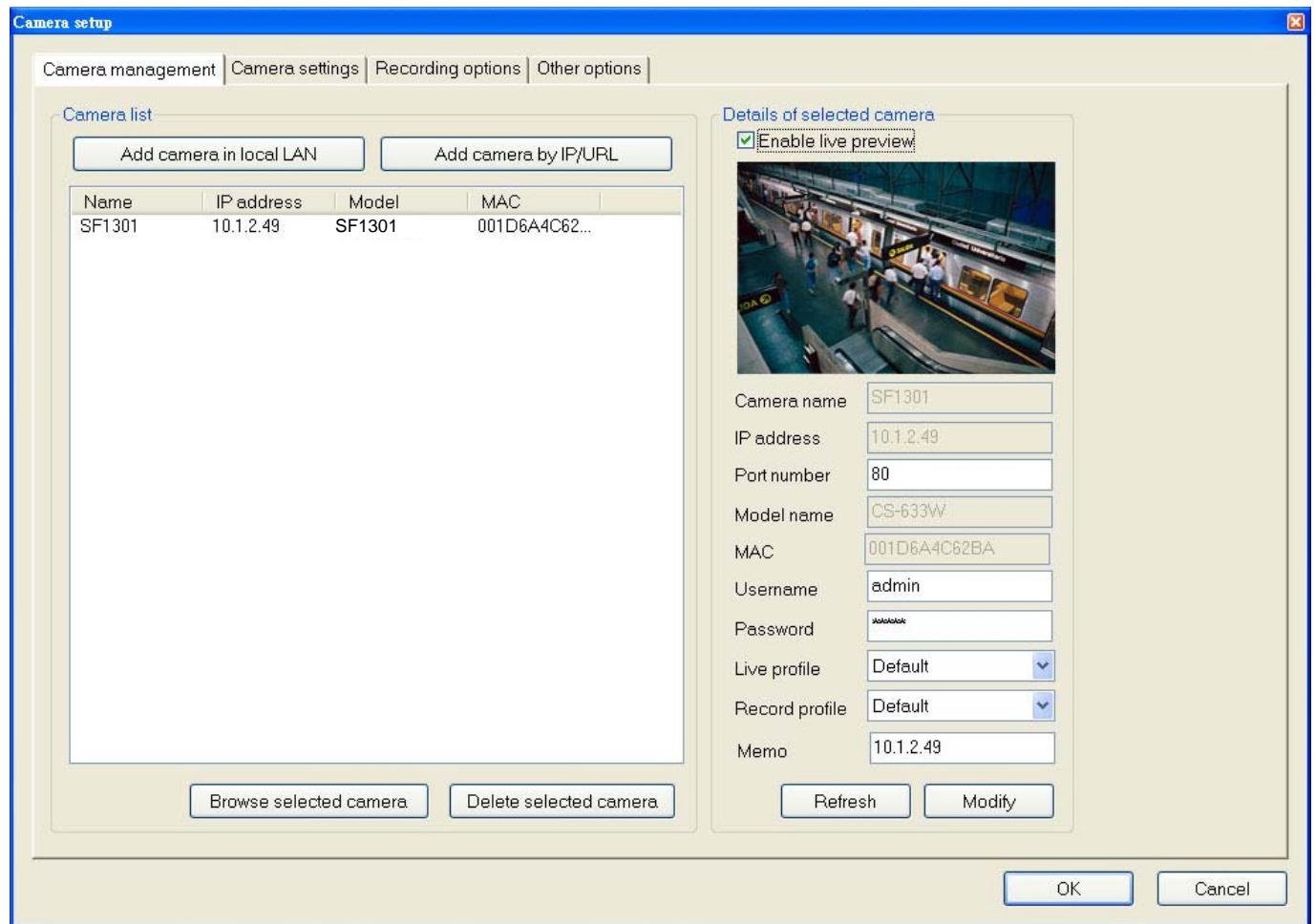


Name	Function
(1) Preview screen	Display live video of the camera. Right-click on the channel will call out the short-cut menu. Right-click context menu: <ul style="list-style-type: none"><li>Replace camera content by...</li><li>Connection</li><li>Motion detection</li><li>Digital input</li><li>Schedule recording</li><li>Enable MIC</li><li>Enable listening</li><li>Enable manual recording</li><li>Remove this camera</li></ul>

Name	Function
(2) Channel status table	<p>Display the channel's status information. Use <math>\uparrow \downarrow</math> can scroll up and down the channel status table.</p> <p>When camera is connected, the record, motion, and GP status will be indicated by figure icon.</p>  <p><b>Recording Status:</b></p> <ul style="list-style-type: none"> <li>- Light up: Recording ON</li> <li>- Light Off: Recording OFF</li> </ul> <p><b>GP Input:</b></p> <ul style="list-style-type: none"> <li>- Light up: YES</li> <li>- Light Off: NO</li> </ul> <p><b>Motion Detection:</b></p> <ul style="list-style-type: none"> <li>- Light up: ON</li> <li>- Light Off: Disable</li> </ul>
(3) Channel Info	Display the name, IP address, model of selected channel and current date and time that user has selected from (2) Channel status table.
(4) Configuration	To add/delete the camera, setup the recording schedule, motion detection, and other related parameters of the camera(see also <a href="#">Chapter 4.3</a> )
(5) Split screen mode	Click to select the split screen mode – 6, 8, 13, 16, 17, 25, 28, 36, 49, 64-split screen mode. Using the   to go next or previous page.
(6) Playback 	Click to call out the IP Player to playback the recorded file by IPCamCenter(see also <a href="#">Chapter 4.4</a> )
(7) 9-split screen mode	Switch to 9-split screen mode.
(8) Record All 	Click to enable recording for all channels. When the recording is enabled, the recording status light of the channel will turn <b>ON</b> .
(9) QUAD screen mode	Switch to 4-split screen mode
(10) Auto Scan 	Start/Stop video screen cycle switch
(11) Single screen mode	Switch to single camera mode.
(12) Full screen 	Use the entire area of the screen to only display the video. To return, press <b>ESC</b> on the keyboard.
(13) Speaker 	Enable/disable speaker.
(14) Audio ON/OFF 	Click to turn on/off the audio sound play.
(15) Record 	Enable/disable recording of the selected channel. When the recording is enabled, the recording status light of the channel will turn <b>ON</b> .
(16) Snapshot 	Capture the current video screen.
(17) PTZ control	When the camera is a PTZ camera, use the PTZ control to move the lens of the camera.
(18) Minimize	Click to close the IPCamCenter to the system tray.
(19) Exit	Close the IPCamCenter application.

## 4.3 System Configuration

Click  from IPCamCenter UI, user can connect the cameras; configure connected cameras, recording settings, motion setting and other parameters.

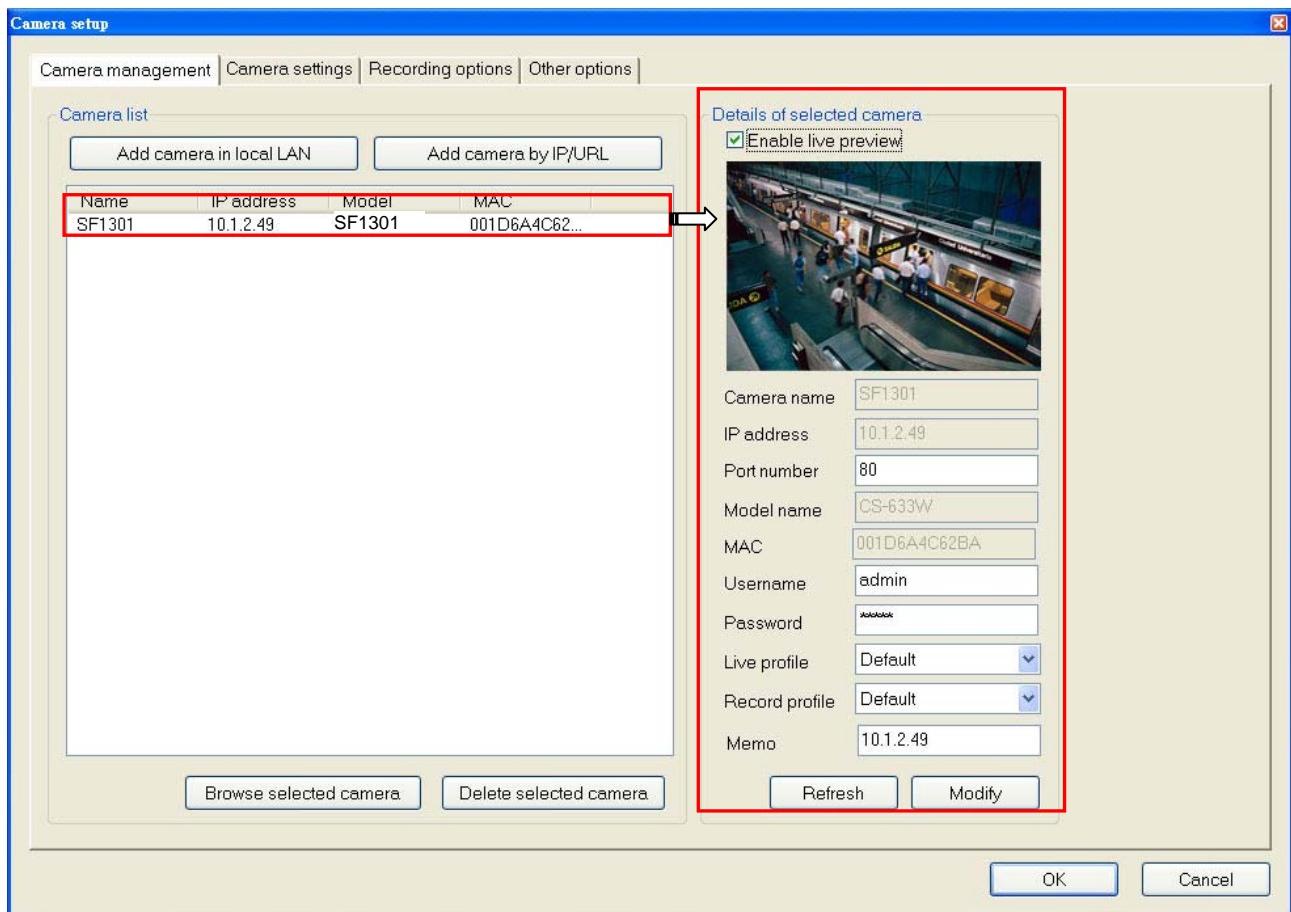


## 4.3.1 Camera Management

User can add a camera connection, delete the camera, and configure the selected camera through the Web configuration. To add a camera connection, please refer to [Chapter 4.2.2](#).

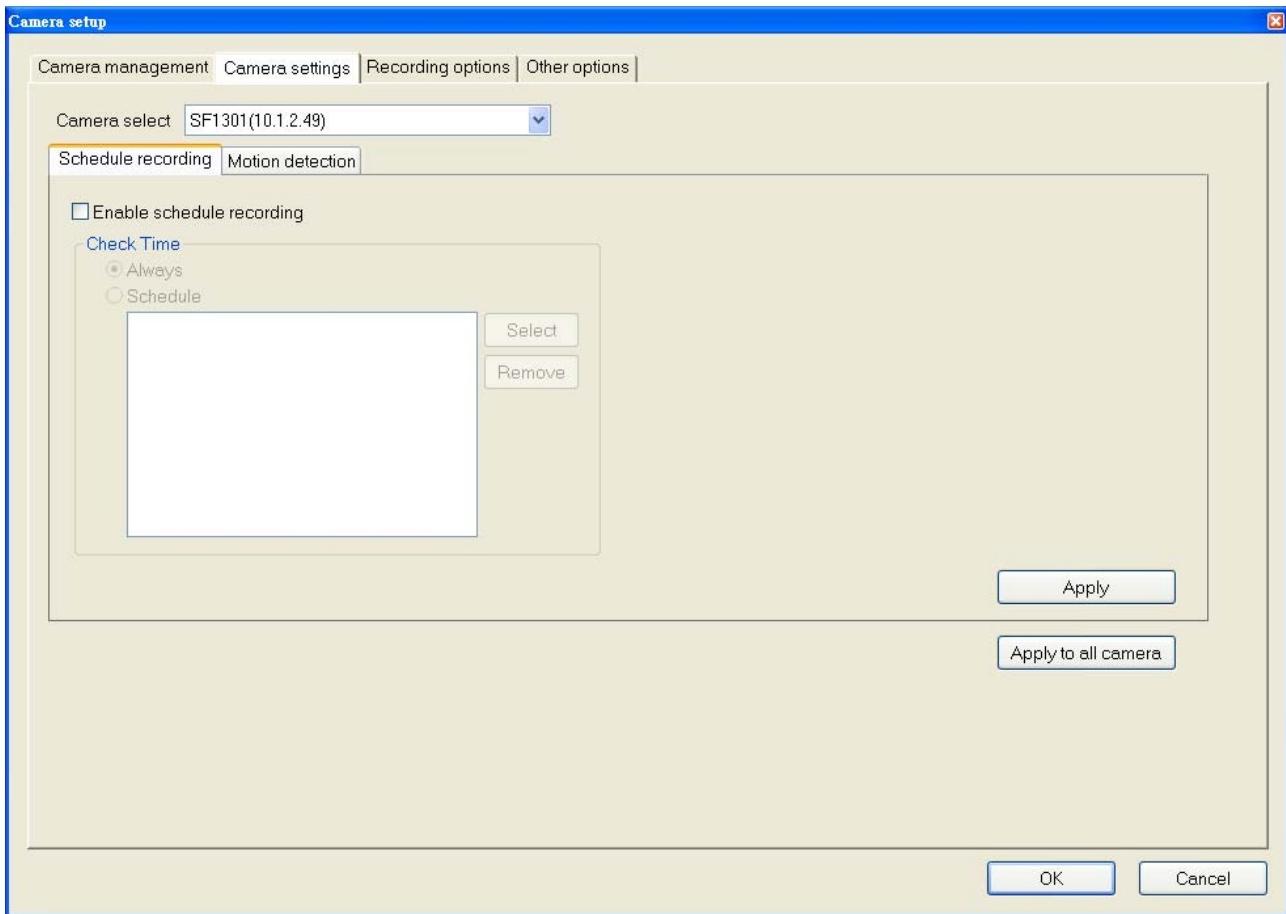
To use Web Configuration, select the camera from Camera List windows and click Web Configuration. The Web configuration will appear. For detail of web configuration, please refer to [Chapter 3.2](#).

To configure the camera, select the camera from camera list and click **Refresh** to get camera information. The selected camera information will display on **Details of selected camera** section. Mark the **Enable live preview** to view the live video of the selected camera. User can modify the **Port number**, **Live profile**, **Record profile**, and **Memo**, and then, click **Modify** to update the changes.



## 4.3.2 Camera Setting

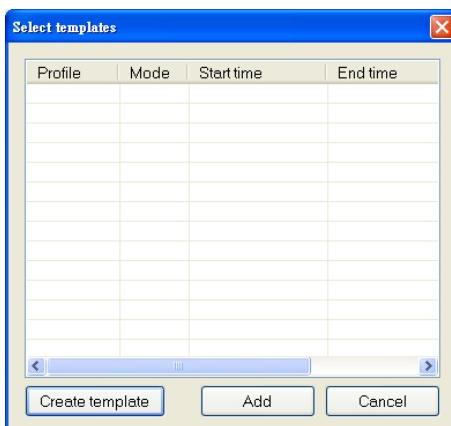
Configure schedule recording and setup motion detection of the camera. Click  > **Camera Setting** to enter the configuration interface.



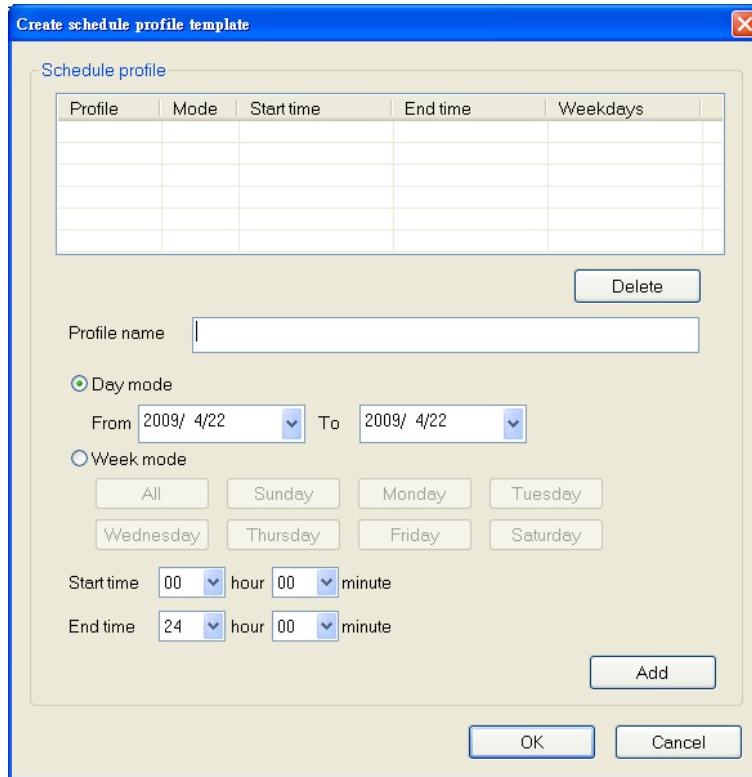
### 4.3.2.1 Setup the Schedule Recording

In Camera Setting, user can enable schedule recording that IPCamCenter will refer to the schedule that user has setup to record the video from monitored cameras.

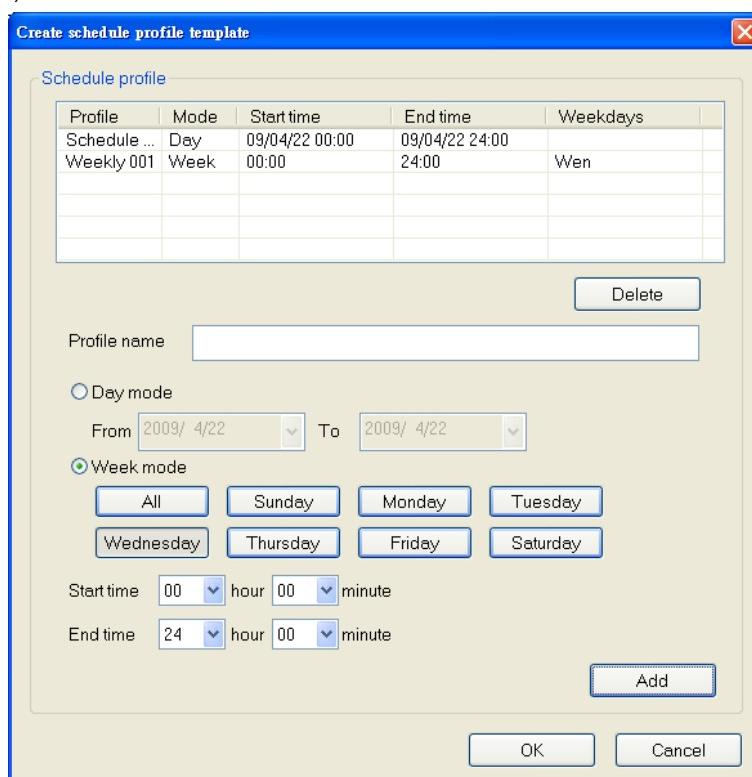
1. Click  > **Camera settings**
2. Mark the **Enable schedule recording**
3. Select the schedule type – **Always** or **Schedule**
  - **Always:** Continuing recording until user stop recording while the IPCamCenter is running.
  - **Schedule:** To recording base on the schedule that user has setup.
4. To setup record schedule, click **Select**.
5. Click **Create template** to setup the record schedule.



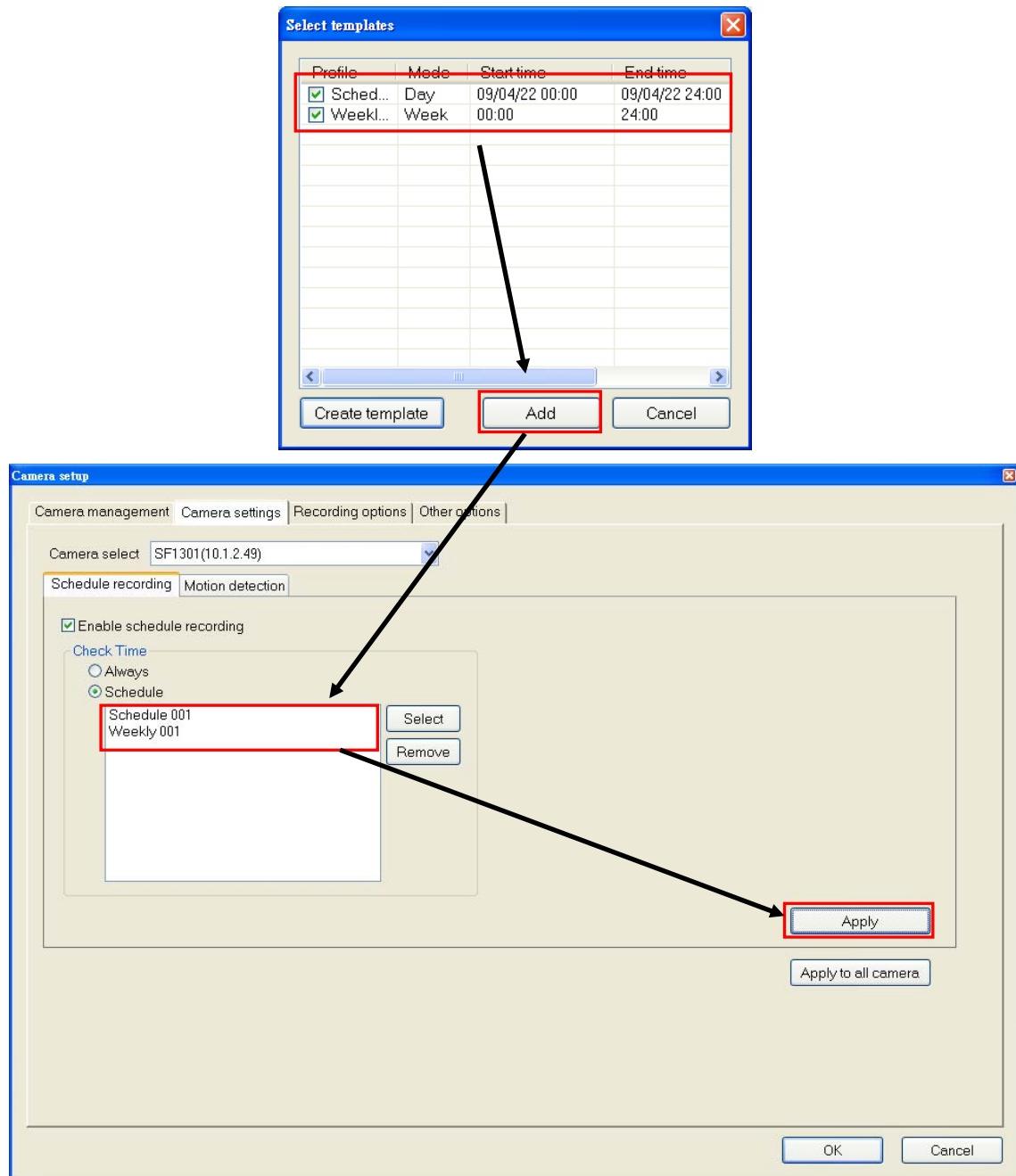
6. There are two types of scheduling mode -- **Date mode** and **Week mode**. Two scheduling modes can be both exist.



7. To setup **Date Mode** schedule, enter the **Profile name** as the schedule name and set the **From** and **To** (click and select the date), and then click **Add**. The date schedule will be added into the schedule profile.
8. To setup **Week Mode** schedule, select **Week mode**. And then, setup the **Start time**, **End time**, and **Week day** (Sun ~ Sat or All) and click **Add**. The week date schedule will added into the schedule profile.
9. Click **OK** to save the recording schedule settings.
10. To delete the schedule, select the schedule and click **Delete**.



11. After setup the recording schedule, user should see all setup schedules in **Select template** windows.
12. User must select the schedule in order to activate the schedule. Click the **Add** to add the select schedule.
13. In Camera setup windows, click **Apply** to complete the schedule record setting. If user wants to use the selected schedule to all cameras, click **Apply to all cameras**.
14. Click **OK** to exit the configuration interface.

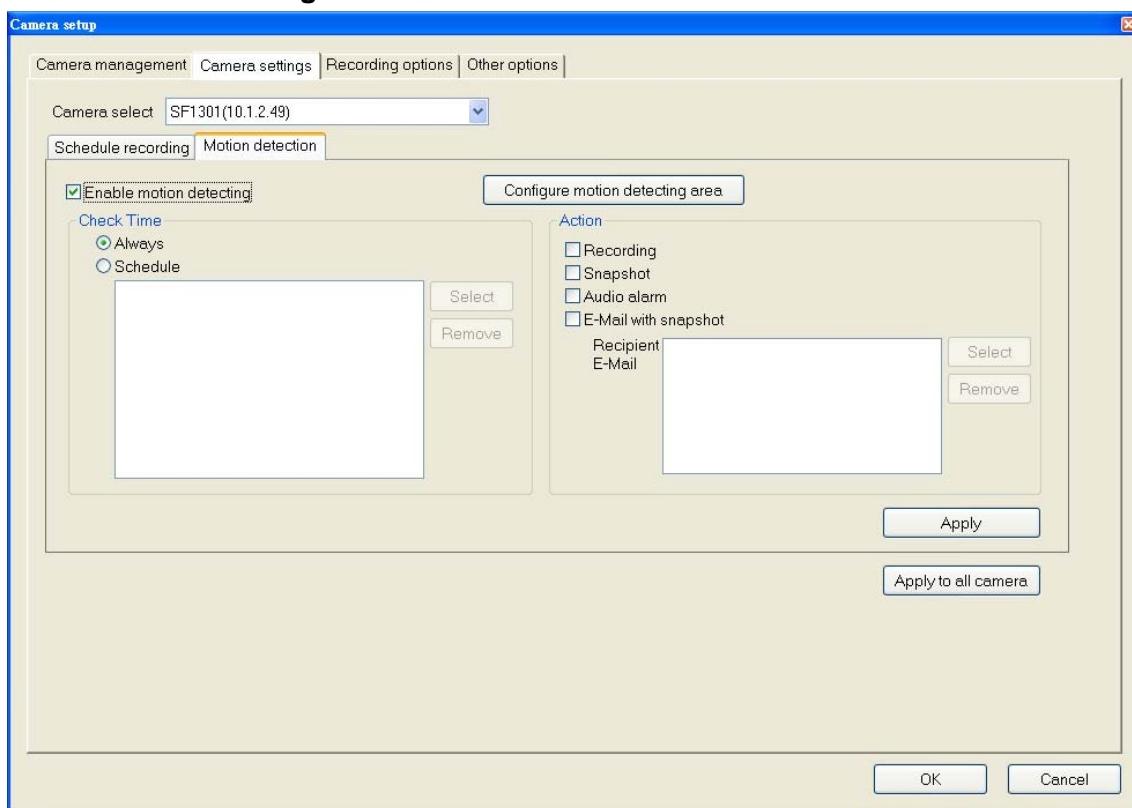


### 4.3.2.2 Setup the Motion Detection

Setting schedule, area and action of the motion detection.

#### A. Enable motion detection

1. Click  > Camera settings > Motion detection
2. Mark **Enable motion detecting** to enable motion detection.

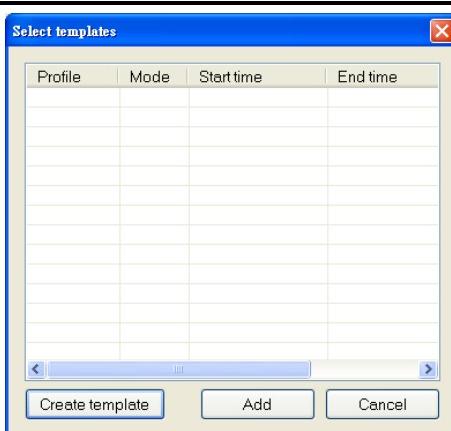


#### B. Setup an motion detection schedule

1. In Motion Detection interface, select the motion detection schedule type – **Always** or **Schedule**
  - **Always:** Continuing motion detection while the IPCamCenter is running.
  - **Schedule:** Start motion detection base on the schedule that user has setup.
2. To setup motion detection schedule, click **Select**.
3. Click **Create template** to setup the motion detection schedule.

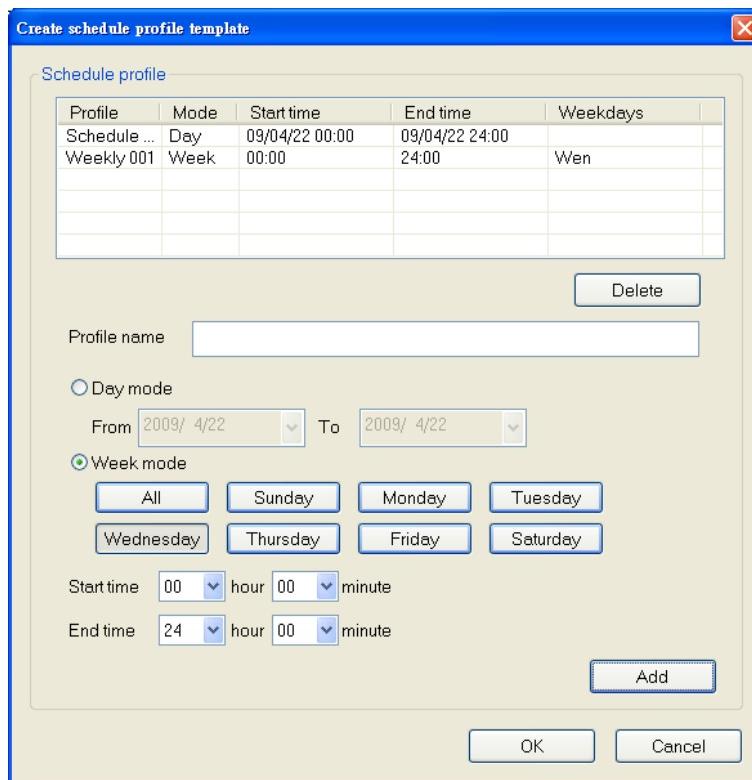


If record schedules have been setup, user should see them in **Select templates** windows. User also can select it as the schedule of motion detection. Just select the schedule and click **Add**.

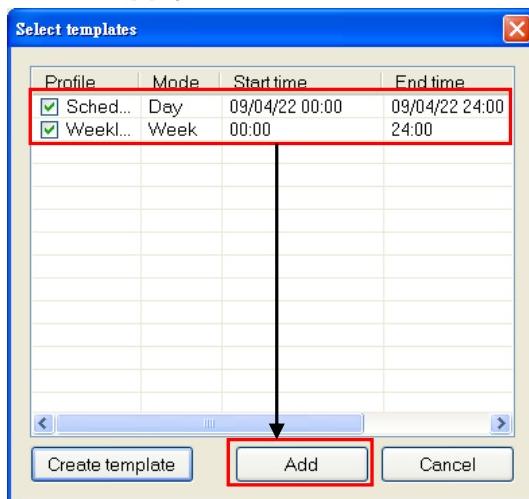


4. There are two types of scheduling mode -- **Date mode** and **Week mode**. Two scheduling modes can be both exist.
5. To setup **Date Mode** schedule, enter the **Profile name** as the schedule name and set the **From** and **To** (click and select the date), and then click **Add**. The date schedule will be added into the schedule profile.
6. To setup **Week Mode** schedule, select **Week mode**. And then, setup the **Start time**, **End time**, and **Week day** (Sun ~ Sat or All) and click **Add**. The week schedule will added into the schedule profile.

7. Click **OK** to save the recording schedule settings.
8. To delete the schedule, select the schedule and click **Delete**.

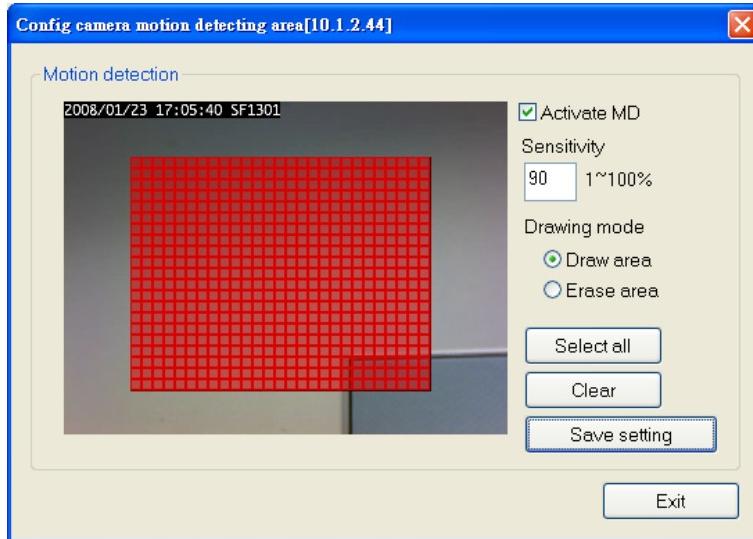


9. After setup the recording schedule, user should see all setup schedules in **Select template** windows.
10. User must select the schedule in order to activate the schedule. Click the **Add** to add the select schedule.
11. In Camera setup windows, click **Apply** to complete the schedule record setting. If user wants to use the selected schedule to all cameras, click **Apply to all cameras**.



### C. Setup a motion detection area

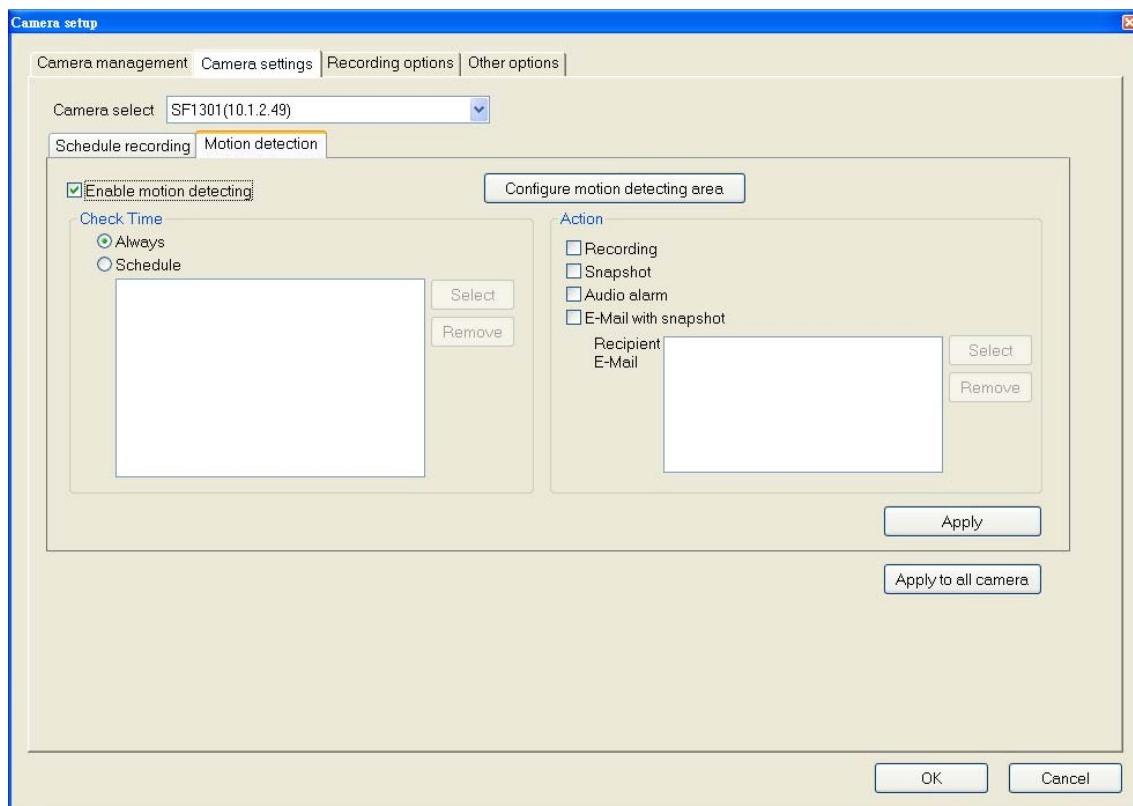
1. Click **Configure motion detection area** to set an area for motion detected.
2. Mark **Activate MD** to enable the motion detection.
3. To adjust **Sensitivity**, enter the value( 1 ~ 100%). The higher the value, the finer the sensitivity is detected.
4. Select **Drawing area** and drag to select the area of motion detection. The selected area will appear a red box. To clear the selected area, select **Erase area** and drag on the selected area to clear. To clear all selected motion detected area, click **Clear** button. Click **Save setting** to complete the setup.
5. Click **Exit** to back to Motion detection interface.
6. In Camera setup windows, click **Apply** to complete the schedule record setting. If user wants to use the selected schedule to all cameras, click **Apply to all cameras**.



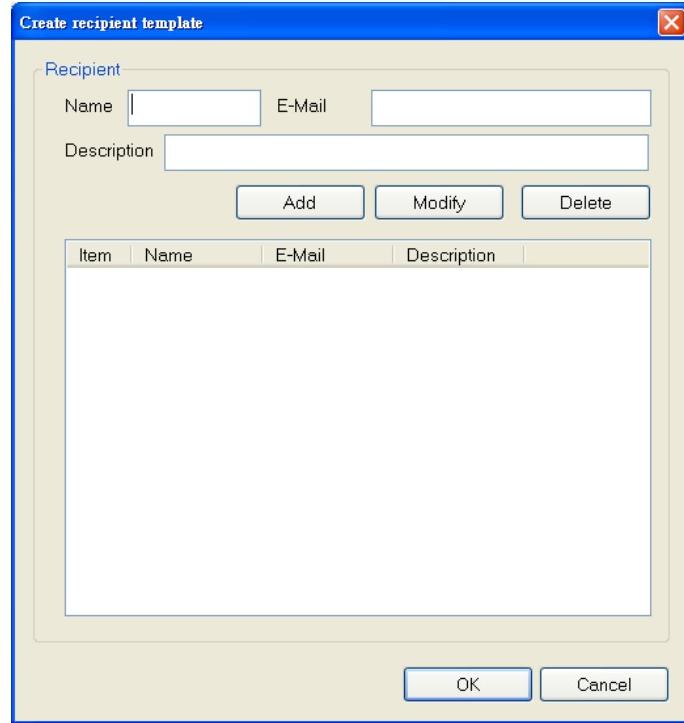
#### D. Select the action of motion detection

After motion detection has enabled, user can select the actions that will be perform when the motion has detected.

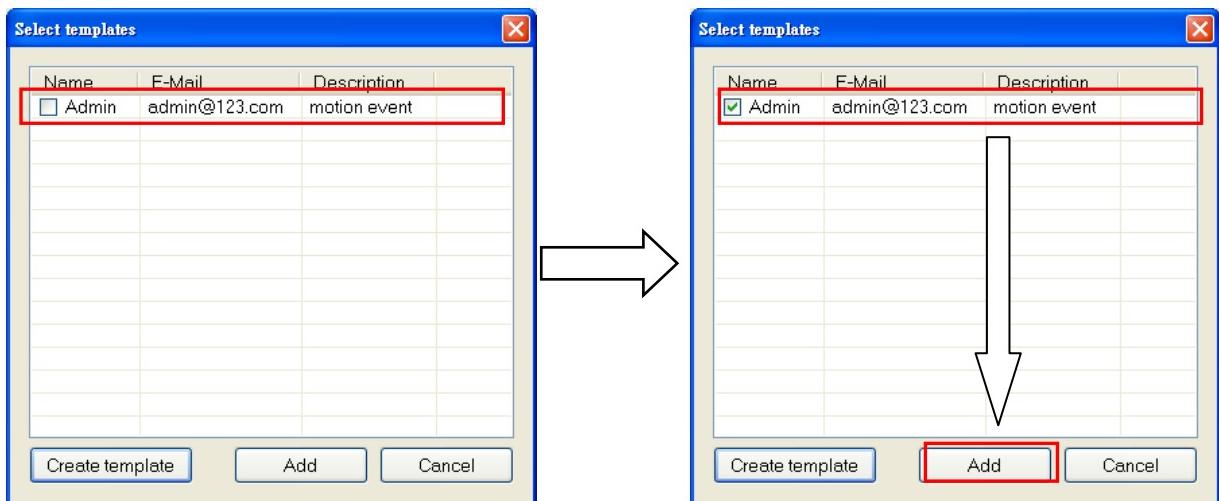
##### 1. Mark the actions to enable them.



- **Recording:** When the motion has detected, the system will start recording.
- **Snapshot:** When the motion has detected, the system will take a snapshot of the current video image.
- **Audio alarm:** When the motion has detected, the system will play an alarm sound that user has setup in **Local alert settings**.
- **E-Mail with snapshot:** When the motion has detected, the system will send out an e-mail with snapshot image to the specific address.
  - a. Click **Select > Create template** to setup a sending e-mail address.
  - b. Enter the **Name** and **E-Mail** of recipient and short **Description** of the e-mail.
  - c. Click **Add**.
  - d. User can add more than one e-mail address. Just repeat the steps a to c.
  - e. Click **OK** to back to the **Select template** windows.



- f. After setup the e-mail address, user should see all setup e-mail in **Select template** windows.
- g. User must select the e-mail in order to activate the e-mail sending. Click the **Add** to add the select e-mail.



2. In Camera setup windows, click **Apply** to complete the schedule record setting. If user wants to use the selected schedule to all cameras, click **Apply to all cameras**.

### 4.3.3 Recording Option

Setup the recording parameters.

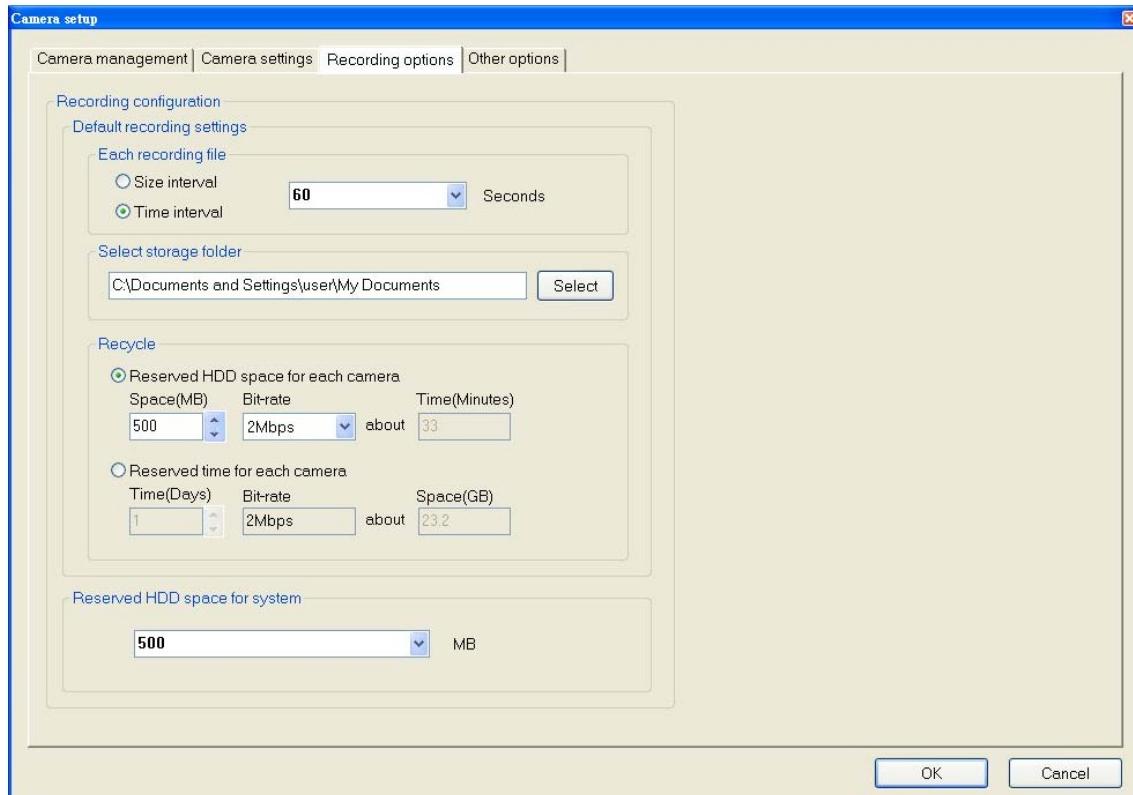
#### ■ Default recording settings

- **Size interval:** Set the maximum file size for each recording file.
- **Time interval:** Set the time gap to recording between each recording file.
- **Select storage folder:** User can change the default storage path. Click **Select** to browse the new storage path.

#### ■ Recycle:

- **Reserved HDD space for each camera:** Set a storage space limit for activate recycle.
- **Reserved time for each camera:** Set the storage time limit for activates recycle.

#### ■ Reserved HDD space for system:



### 4.3.4 Other Options

#### ■ Proxy Server

Mark the **Proxy Server** to enable the proxy server service. Enter the **Address** and **Port** of your proxy server on the network. Enable **Bypass proxy server for local network address** to allow the intranet connection doesn't need to pass through the proxy server.

#### ■ Time interval of scan

Set the time gap of the Auto Scan in seconds.

#### ■ Local alert settings

- **Motion detection alert sound:** Set the alarm sound when motion has detected.
- **Digital Input alert sound:** Set the alarm sound when camera receives the unusual sound.
- **Video loss alert sound:** Set the alarm sound when video of the camera is lost.

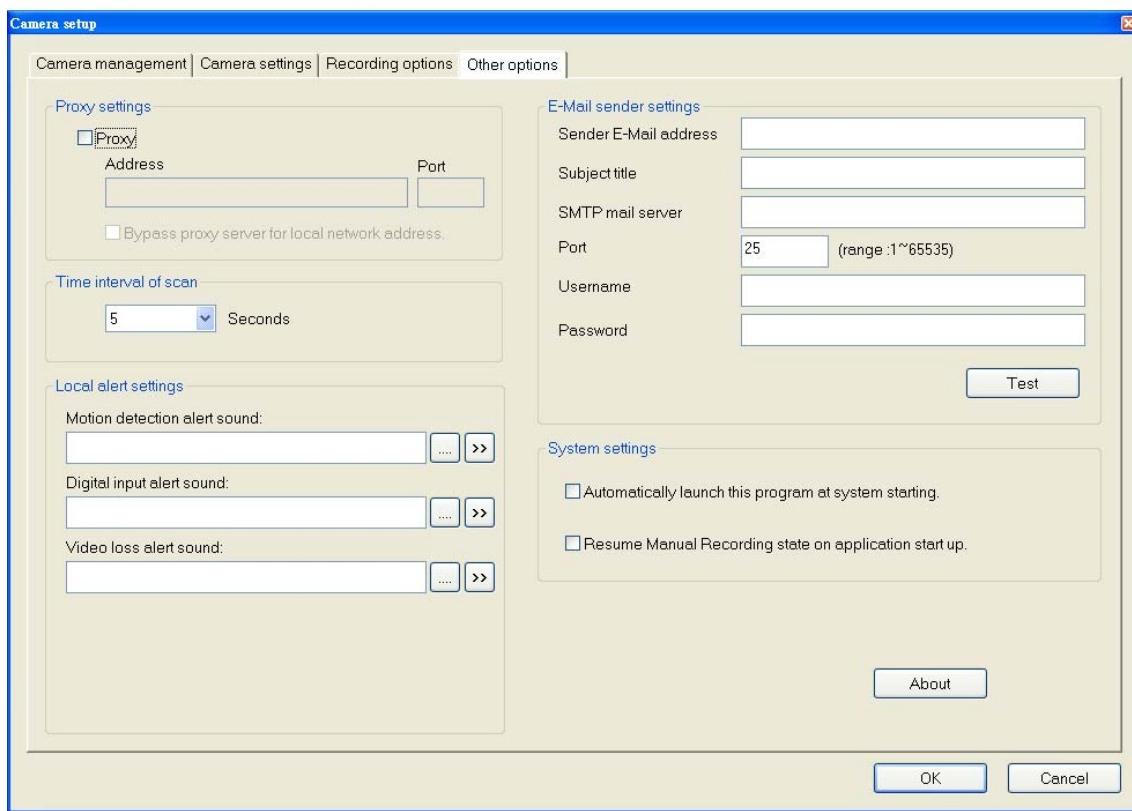
#### ■ E-Mail sender settings: click **Test** to test the correction of the e-mail setting.

- **Sender E-mail Address:** Enter the sender's e-mail address.
- **Subject title:** subject of the mail.
- **SMTP Mail Server:** Enter the SMTP server of your e-mail account.
- **Recipient E-mail Address:** Enter the e-mail address that user wants to send the snapshot image.
- **Port:** Enter the connection port of the mail server.
- **User Name:** Enter the username or login name for your e-mail account.
- **Password:** Enter the password for your e-mail account.

## ■ System settings

- **Automatically launch this program system starting:** The IPCamCenter will execute automatically when the Windows system is startup.
- **Resume Manual Recording state on application startup:** When IPCamCenter is startup, the recording state will be manual.

## ■ About: Click it to view the version information of the IPCamCenter.

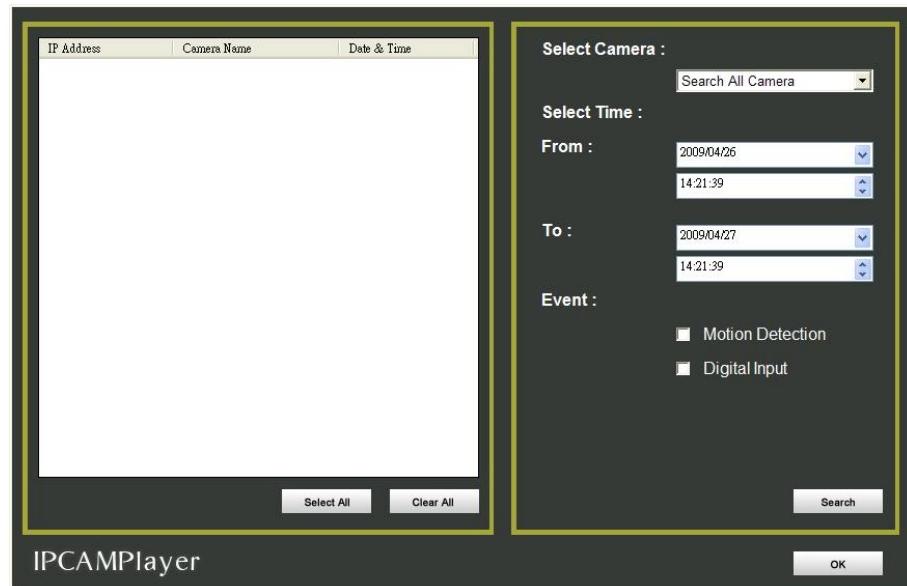


## 4.4 Playback the Recorded File

If user has enabled the recording on IPCamCenter, then user can playback the recorded file on **IPCamPlayer**.

To playback the recorded file, follow the below steps:

1. Click  from IPCamCenter to call out the IPCamPlayer.
2. The IPCamPlayer will show up and search the recorded file automatically. The search found recorded files will be listed out.



3. Also, user can search the recorded file by camera, time period, or events. Click **Search** to start search.
4. Select the recorded file that user wants to view and click **OK** to start playback.
5. During the playback processing, user can press  button to increase the playback speed from 1x to 8x. Press  button to decrease the playback from 1x to 1/8x.
6. Press  to go to play next recorded file and  to back to last playback recorded file.
7. To stop playback, press .



# Appendix A      Technical Specifications

Specifications	SF1301W (wireless)	SF1301 (wired)
Model		
Device	1/4 inch CMOS	
Effective Pixels	1280 x 1024	
Min. scene Illumination	0.5 Lux	
F/No	F2.8	
Focus Length	f4.5mm	
Depth	20cm~Infinity	
Viewing Angle	Horizontal:43.6 ° Vertical:35.7 °, Diagonal:54 °	
Motion Detection	Enable/disable; Sensitivity 0~100; Drawing mode - Enable/Disable	
Exposure Control	Auto	
AGC	Yes	
White Balance	Auto	
Compression	MPEG4/MJPEG dual format compression simultaneously	
Multi-profile	Support 4 video streams simultaneously	
Picture Resolution	1280 x 1024; 1024 x 768; 640 x 480; 512 x 384; 320 x 240; 160 x 120	
Bit Rate	IE browser - 900K, 1M, 1.25M, 1.5M, 1.75M, 2M Mobile Video - 64K, 128K, 192K, 256K, 320K, 384K, 448K, 512K	
Image Frame Rate	10 fps at 1280x1024; 30 fps at 640x480	
Black/White mode	Yes	
Digital Zoom	16X	
Mirror	Vertical mirror/Horizontal mirror	
Compression	AMR/ADPCM	
Built-in Microphone	Sensitivity -42dB +/- 3dB (5 Meters distance min.) S/N Ratio:more than 58 dB; Directivity Omni-directional	
Frequency Response	50~16000HZ	
Audio Line Output	Output Line-out For external speaker	
Pre-recording/Post-recording	0~15 seconds/0~15 seconds	
Overwrite	Enable/disable	
Recording mode	Continuous/Event/Motion Detection	
System Log	Up to 500 items stored in flash	
Ethernet	Ethernet (10/100 Mbps Fast) , RJ-45 connector	
Protocol	IPV4, ARP, TCP, UDP, ICMP, DHCP, NTP, DNS, DDNS, SMTP, FTP, HTTP, Samba, PPPoE, UPnP, RTP, RTCP, RTSP	
Auto-MDIX	Yes	
3GPP	Audio codec/AMRVideo codec/MPEG4Protocol/RTSP, RTP	
WPS	Yes	No
Web Browser	IE 7.0/FireFox 2.0.7/Safari 3.2.2 or above	
User account	Up to 20 users	
Security	Password protection:configured by the administrator	
Temperature and humidity	-15~60°C (Storage), 90% humidity/0~40°C (Operating), 85% humidity	
Power Consumption	6W (DC 5V)	
Dimensions (W x H x D)	71mm x 44mm x 133mm	
Weight	158g (w/o bracket)	136g (w/o bracket)
Indoor/Outdoor	Indoor	
Bundled accessory	Bracket	

\* Specifications subject to change without prior notice

Wireless	
<b>Frequency</b>	2.412-2.4835 GHz
<b>Channels</b>	11 channels for United States 13 channels for European Countries 13 channels for Japan
<b>Wireless Data Rates</b>	IEEE 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps IEEE 802.11b: 11, 5.5, 2, 1 Mbps Auto-select or Manual specified.
<b>Out Power</b>	16 dBm@11b(Typical) 12 dBm@11g(Typical)
<b>Antenna</b>	Dipole Antenna <ul style="list-style-type: none"> <li>- Gain: 2 dBi</li> <li>- Connector: RP-SMA (M)</li> <li>- Operating Frequency: 2.4~2.5Ghz</li> </ul>